



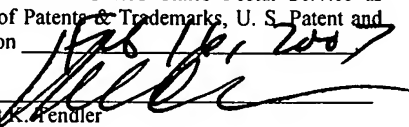
1Fn 2614
Best Available Copy

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Daniel A. Henderson Examiner: Olisa Anwah
Application No: 10/047,191 Art Unit: 2614
Filing Date: 11/07/2001
Title: Method and Apparatus For Improved Personal Communication
Devices and Systems
Attorney Docket: H-117 (HEND-0026)

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner of Patents & Trademarks, U. S. Patent and Trademark Office, P. O. Box 1450, Alexandria, VA 22313-1450 on Feb 16, 2007

By: 
Robert K. Tendler
Reg. No.: 24,581
Attorney for Applicant

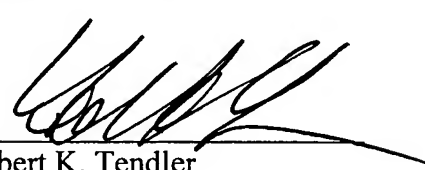
SUPPLEMENTAL AMENDMENT

Commissioner of Patents & Trademarks
U.S. Patent and Trademark Office
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant provides herewith a Rule 131 Declaration with respect to the above-captioned case.

Respectfully submitted,


Robert K. Tendler
Reg. No.: 24,581
65 Atlantic Avenue
Boston, MA 02110
Tel: (617) 723-7268

Date: Feb 16, 2007



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Daniel A. Henderson Examiner: Olisa Anwah
Application No: 10/047,191 Art Unit: 2614
Filing Date: 11/07/2001
Title: Method and Apparatus For Improved Personal Communication Devices
and Systems
Attorney Docket: H-117 (HEND-0026)

RULE 131 DECLARATION

Commissioner of Patents & Trademarks
U.S. Patent and Trademark Office
P. O. Box 1450
Alexandria, VA 22313-1450

Now comes Daniel A. Henderson and deposes and says:

1. That I am the inventor of the invention described in the patent application entitled "Method and Apparatus For Improved Personal Communication Devices and Systems," U.S. Patent Application No. 10/047,191, having a priority date of January 5, 1994.
2. That this priority date is based on U.S. Patent Application Serial No. 08/177,851, filed January 5, 1994, the subject application having claimed benefit thereof under 35 USC 119, as can be seen in Appendix A.
3. That in the prosecution of the above-captioned case a reference to David E. Albert, U.S. Patent No. 5,452,356, which issued September 19, 1995 and has a filing date of February 10, 1993, was cited against the claims of this case.

4. That as will be seen below, Applicant conceived of the claimed invention prior to February 10, 1993 and did not abandon, suppress or conceal the invention from at least before February 10, 1993 to January 5, 1994, the filing date of this application.

5. That as can be seen from Appendix B, Applicant conceived the subject invention prior to February 10, 1993, as evidenced by a block diagram and flow chart indicating the wireless transmission of an image and caller ID to a wireless portable communication device.

6. That this block diagram describes a pageable device, namely the paging receiver, in which an image and the caller's telephone number are transmitted over a paging network.

7. That this caller identification information is transmitted along with the image to the paging network, which caller identification information is then transmitted through the paging network to the portable communication device.

8. That the concept claimed in Claim 46 is described in the block diagram and flow chart of Appendix B.

9. That diligence from the date of conception to the effective filing date of the subject application is shown by the month-by-month activity indicated by the documents listed below and available in the indicated appendices:

<u>Appendix</u>	<u>Date</u>	<u>Description</u>
C	02/1993	"Radio Frequency Device" programmable by a PC using data interface software via IR, Serial, Parallel RJ-11 or PCMCIA. Witnessed by Suzanne Billing Henderson.
D	02/1993	"Intellipager product view created by Daniel A. Henderson
E	03/1993	Letter from Real Time Strategies regarding Daniel A. Henderson's inquiry for design assistance in messaging and wireless communication by cellular and paging.
F	03/1993	Assignment and License agreement with Vanig Godoshian regarding US Patent 4,490,579.

G	04/1993	Notes regarding Daniel A. Henderson's discussions with NEC - North America Pager engineering Department and their legal department as well as Motorola at their Boynton Beach, Florida facility.
H	04/1993	Non-disclosure agreement between Doctor Design, Inc. and Innovad regarding Daniel A. Henderson's RFP for design assistance of an auto-dialing paging receiver.
I	04/1993	Letter from NEC America Inc. indicating that they will not meet with Daniel A. Henderson without signing their NDA in which Daniel A. Henderson would have given up all his rights.
J	04/1993	Letter to Doctor Design Inc. thanking them for Daniel A. Henderson's visit to their facilities to pursue production design assistance.
K	04/1993	Non-disclosure Agreement with Robert Hutto, design engineer referred from Doctor Design.
L	05/1993	Approx. date is early May 1993, which shows Daniel A. Henderson's notations for the phone number in Japan for Kazuo Hashimoto seeking a license under his patents.
M	05/1993	Facsimile received from AT&T customer information center regarding research about Caller ID technical reference materials.
N	05/1993	Engineering Services Quotation received from Doctor Design Inc.
O	05/1993	Non-disclosure agreement with Innovad and Hashimoto Corporation regarding the Radio Frequency Auto Dialer.
P	05/1993	Short thank-you note to Kazuo Hashimoto after initial meeting.
Q	06/1993	Letter to Kazuo Hashimoto citing draft letter of understanding for license under his US Patents 4,821,308; 4,882,744; and 4,065,642.
R	06/1993	Letter to Kazuo Hashimoto regarding GlobalLink company and the draft license agreement
S	06/1993	Non-disclosure agreement between GlobalLink Communications Inc. and Innovad - Dan Henderson.
T	06/1993	Letter of understanding - signed License Agreement between Hashimoto Corporation and Daniel Henderson/Innovad Company.
U	07/1993	Product view and feature chart shows the "intellect": prototype now in the Smithsonian that was in development for Hashimoto demonstration.
V	08/1993	Letter to Hewlett Packard requesting license or joint venture for serial infrared Link and PCMCIA technology.

W	08/1993	Fax received from inquiry related to AlphaPage product.
X	08/1993	Article covering the Patent Information Clearing House that resulted in an interview of Daniel A. Henderson. Henderson often conducted his own prior art searches in 1992-1995.
Y	08/1993	Drawing that showed one cellular carrier implementation for messaging.
Z	09/1993	Letter to NEC America Inc. again requesting a meeting and mutually agreeable NDA
AA	10/1993	Letter to Shinwa Communications of America Inc. after first meeting and business cards received for tentative meeting in Japan.
BB	10/1993	Letter from Mitsui Comtek Corp. offering to assist in meeting in Japan with Casio.
CC	11/1993	Product data sheet for speaker to be spec'ed in the "Intellect" device - received from Darren Townsley, then a sales engineer at Steven Engineering.
DD	11/1993	Letter to Shinwa Communications of America Inc. informing them that Daniel A. Henderson had become assistant to Kazuo Hashimoto.
EE	12/1993	Budget analysis for patent / market research related to invention (note brochure printing, travel for Las Vegas CF Show, Shinwa visit).
FF	12/1993	Non-disclosure agreement with Morris Recsc regarding Caller ID and Paging System
GG	12/1993	"Intellect" product brochure and packing receipt.
HH	01/1994	Teledynamics Product brochure picked up for research in Las Vegas Consumer Electronic Show.

10. That as can be seen from the documents associated with the above appendices, the concept was complete and witnessed prior to February 10, 1993, thus predating the filing date of the Albert patent.

11. That diligence is shown from the conception date to the date of actual reduction to practice and from the conception date to the constructive reduction to practice afforded by the filing date of this patent application.

12. That the invention was not abandoned, suppressed or concealed, as is shown by month-to-month activity in support of bringing the claimed subject matter to commercialization.

Further deponent sayeth not.

I further declare that all the statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



Daniel A. Henderson

Date: 2.16.2007

APPENDIX A



US006278862B1

(12) **United States Patent**
Henderson

(10) Patent No.: **US 6,278,862 B1**
(45) Date of Patent: ***Aug. 21, 2001**

(54) **METHOD AND APPARATUS FOR
ENHANCING THE EFFICIENT
COMMUNICATION OF INFORMATION IN
AN ALPHANUMERIC PAGING NETWORK**

(76) Inventor: **Daniel A. Henderson, 33300 Mission
Blvd., Union City, CA (US) 94587**

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-
claimer.

(21) Appl. No.: **08/177,851**

(22) Filed: **Jan. 5, 1994**

(51) Int. Cl. **H03Q 7/00; G08B 5/22**

(52) U.S. Cl. **455/31.1; 340/825.27;
340/825.44**

(58) Field of Search **379/56, 63, 355,
379/62; 340/825.44, 825.27; 455/355, 31.1**

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,065,642 12/1977 McClure 179/18 B
4,072,824 2/1978 Phillips 179/18 B

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

3315625 10/1984 (DE) 379/58
3329267 2/1985 (DE) 379/58
3421886 12/1985 (DE) H04M/1/00
0 212 761 8/1986 (EP) H04Q/7/04

(List continued on next page.)

OTHER PUBLICATIONS

Messaging: A New Direction—Awash in E-Mail troubles?
A Rall Of New Products Is Coming To The Rescue,
Network Computing, Oct. 1, 1996, pp p. 58.

Identafone overview from website dated Oct. 17, 1996.
NetPAGE product overview.

(List continued on next page.)

Primary Examiner—Edward L. Coles, Sr.

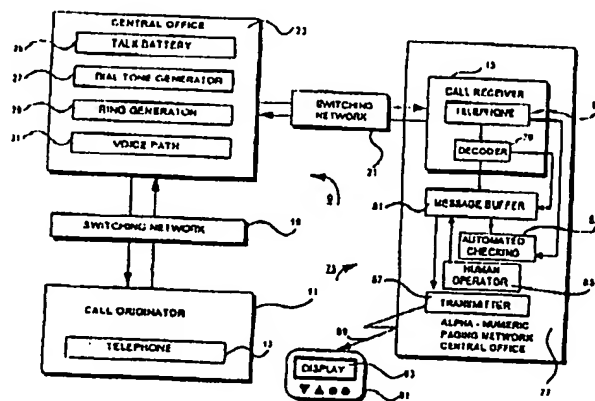
Assistant Examiner—Pan Lee

(74) Attorney, Agent, or Firm—Melvin A. Hunn

(57) **ABSTRACT**

A method and apparatus is described for enhancing the communication of data in an alphanumeric paging network. In accordance with the present invention, caller-identification information is automatically transmitted through a telephone network to a central office of a alphanumeric paging network when a page-originating communicant engages the network. The caller-identification information preferably includes numeric data which identifies the telephone number of the particular telephone unit utilized by the page-originating communicant to engage the alphanumeric paging network, and alphanumeric text which identifies the entity associated in the telephone directory with that particular telephone number. This information may be utilized in an automated fashion to reduce the required interaction between the alphanumeric paging network and the page-originating communicant. In particular it is helpful in minimizing the amount of human interaction required. The page-originating communicant may be challenged or queried to determine the veracity and accuracy of the information transmitted in the caller-identification signal, preferably in an automated fashion utilizing a synthesized voice presentation of questions coupled with responses provided by the page-originating communicant with the key pad of the particular telephone being utilized by him or her. The page-originating communicant may then be optionally engaged by a human or automated operator which then receives an optional message for transmission to the page-receiving communicant along with the caller-identification information. Upon receipt, the portable communication device carried by the page-receiving communicant decodes the information and utilizes it in a manner to determine what is displayed on the display of the portable communication device.

6 Claims, 23 Drawing Sheets





0026
08/726024.

SPECIFICATION

Docket No. 0317MH-23513

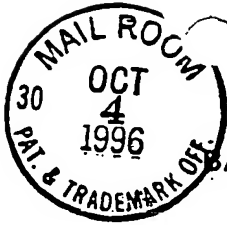
CERTIFICATE OF EXPRESS MAIL	
EXPRESS MAIL NO. <u>PM 385697526 US</u>	
<i>I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" under 37 CFR § 1.10 on the date indicated below and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.</i>	
<u>10/4/96</u>	<u>Meleathum</u>
Date of Deposit	Signature
<u>Oct 4, 1996</u>	

TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN that I, **DANIEL A. HENDERSON**, have invented new and useful improvements in a

METHOD AND APPARATUS FOR IMPROVED PAGING RECEIVER AND
SYSTEM

of which the following is a specification:



08/726024

BACKGROUND OF THE INVENTION

1. **Field of the Invention:**

This invention relates in general to communications systems and in particular to communications systems which include paging devices.

2. **Description of the Prior Art:**

Numerous companies are attempting to improve the manner in which people communication over wireless systems. The present invention addresses many deficiencies in the prior art systems.

1 **CROSS-REFERENCE TO RELATED APPLICATIONS**
2

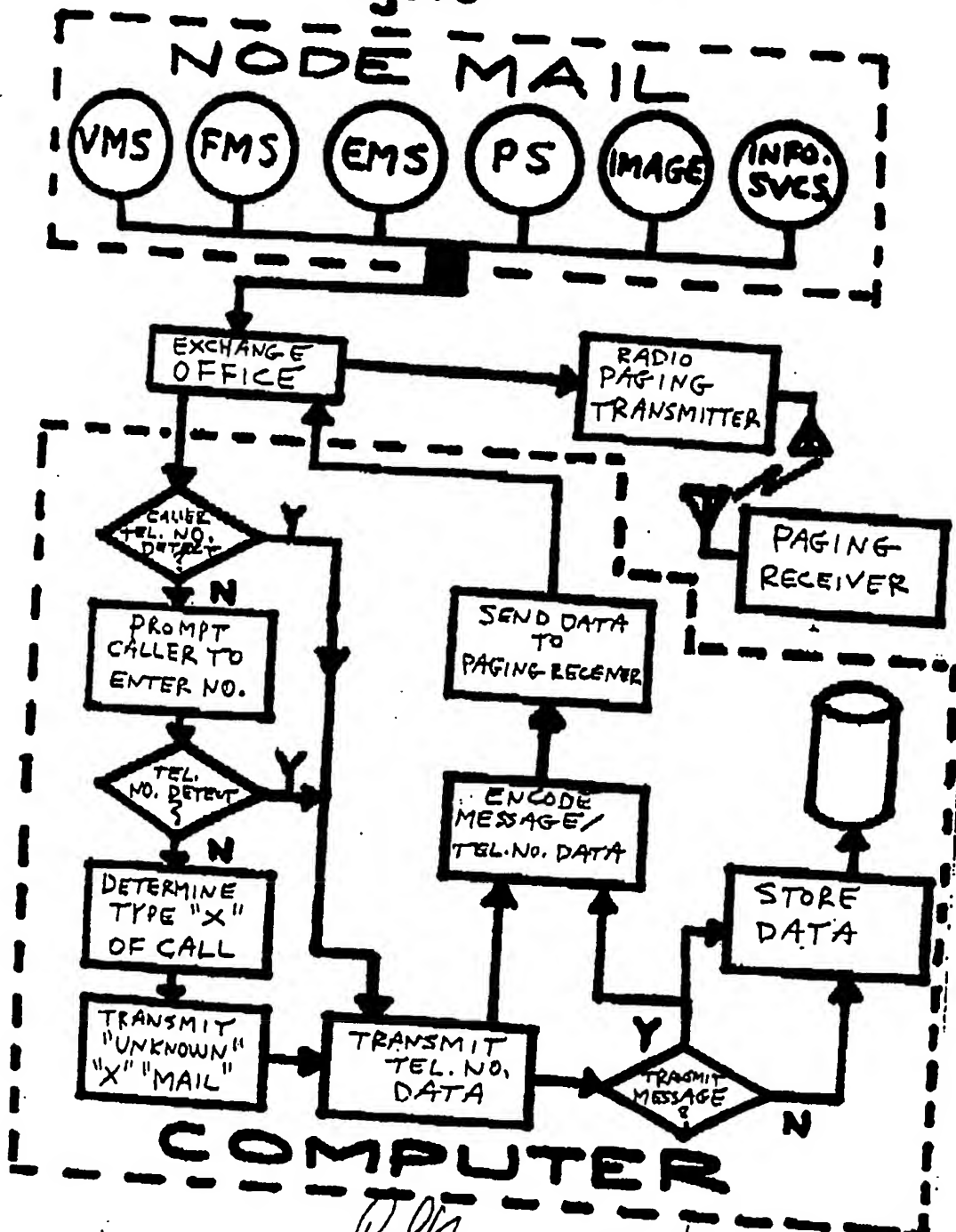
3 This Application claims the benefit of the filing date under 35 USC §§119 and/or
4 120, and 37 CFR §§1.60 and 1.78 to the following U.S. and U.S. provisional patent
5 applications, and is a continuation-in-part of the U.S. patent application:

6 1. U.S. provisional patent application serial no. 60/005,029, filed on October
7 6, 1995, entitled "Method and Apparatus for Improved Paging Receiver and System";
8 and

9 2. U.S. patent application serial no. 08/177,851, filed on January 5, 1994,
10 entitled "Method and Apparatus for Enhancing the Efficient Communication of
11 Information in an Alphanumeric Paging Network".
12
13

APPENDIX B

Figure

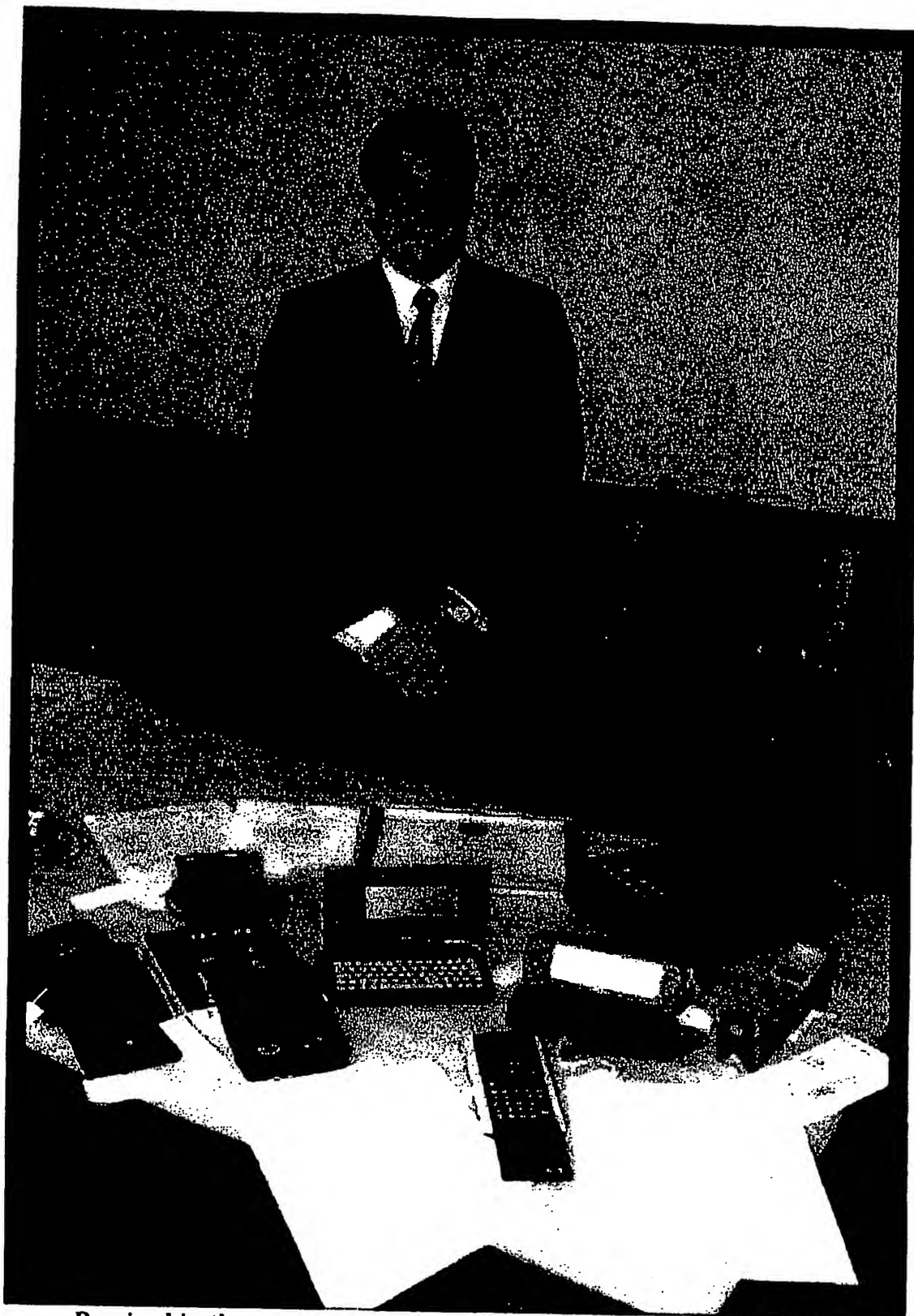


[Signature]
Jul. 17, 1993

X *[Signature]*
1-17-93

05

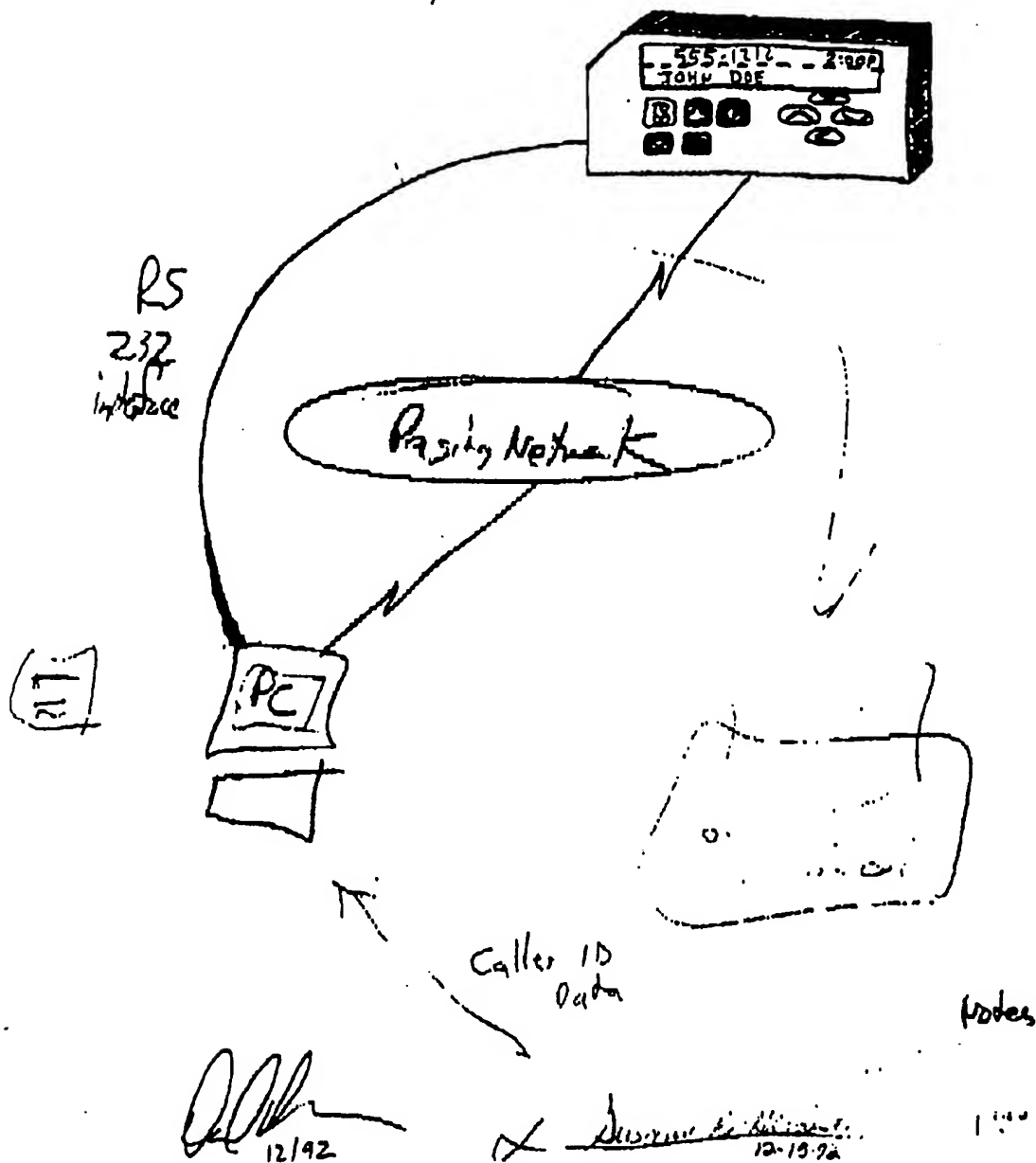
APPENDIX C



Received in the permanent collection of the Smithsonian Institution

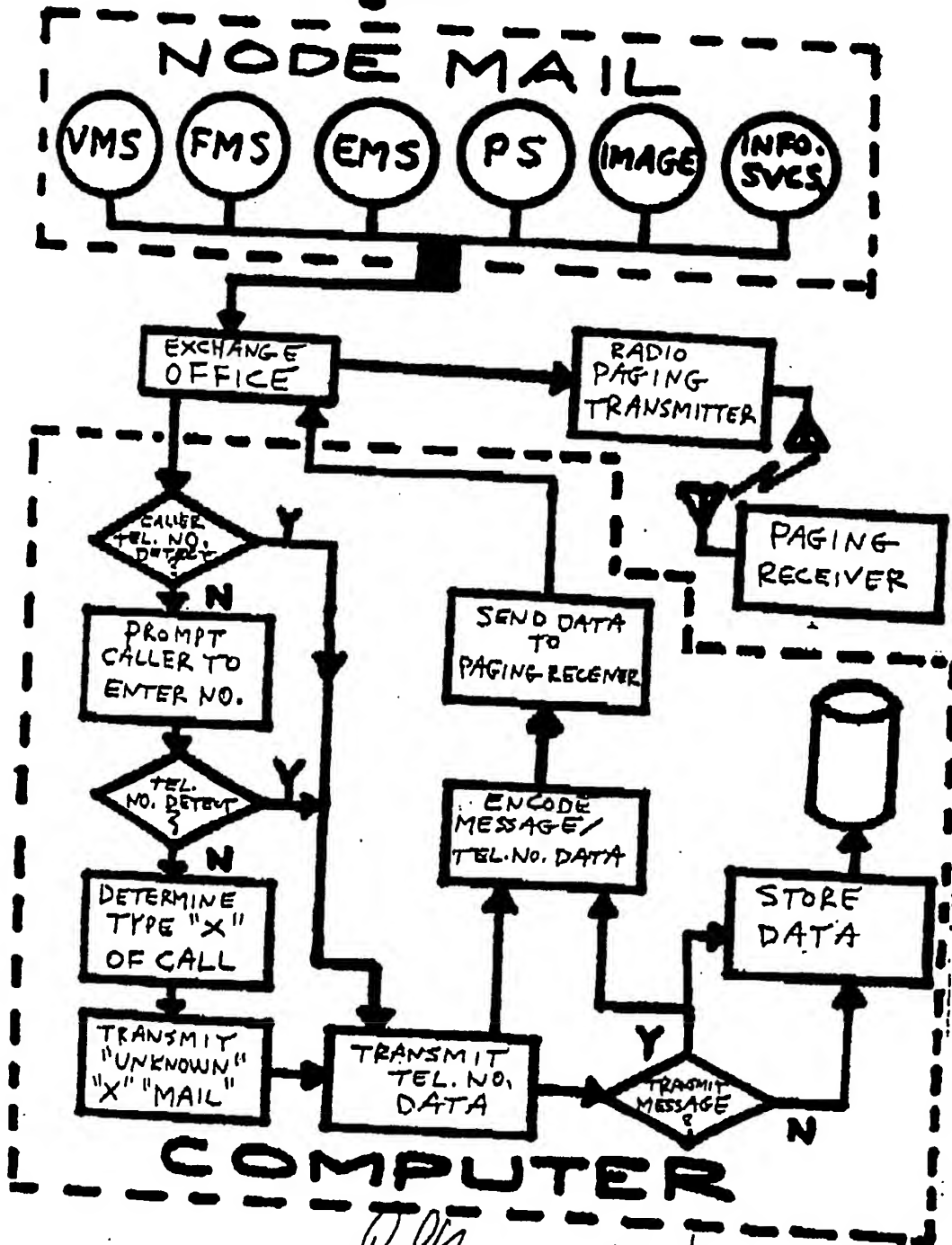
APPENDIX D

INTELLIPAGE™



APPENDIX E

Figure

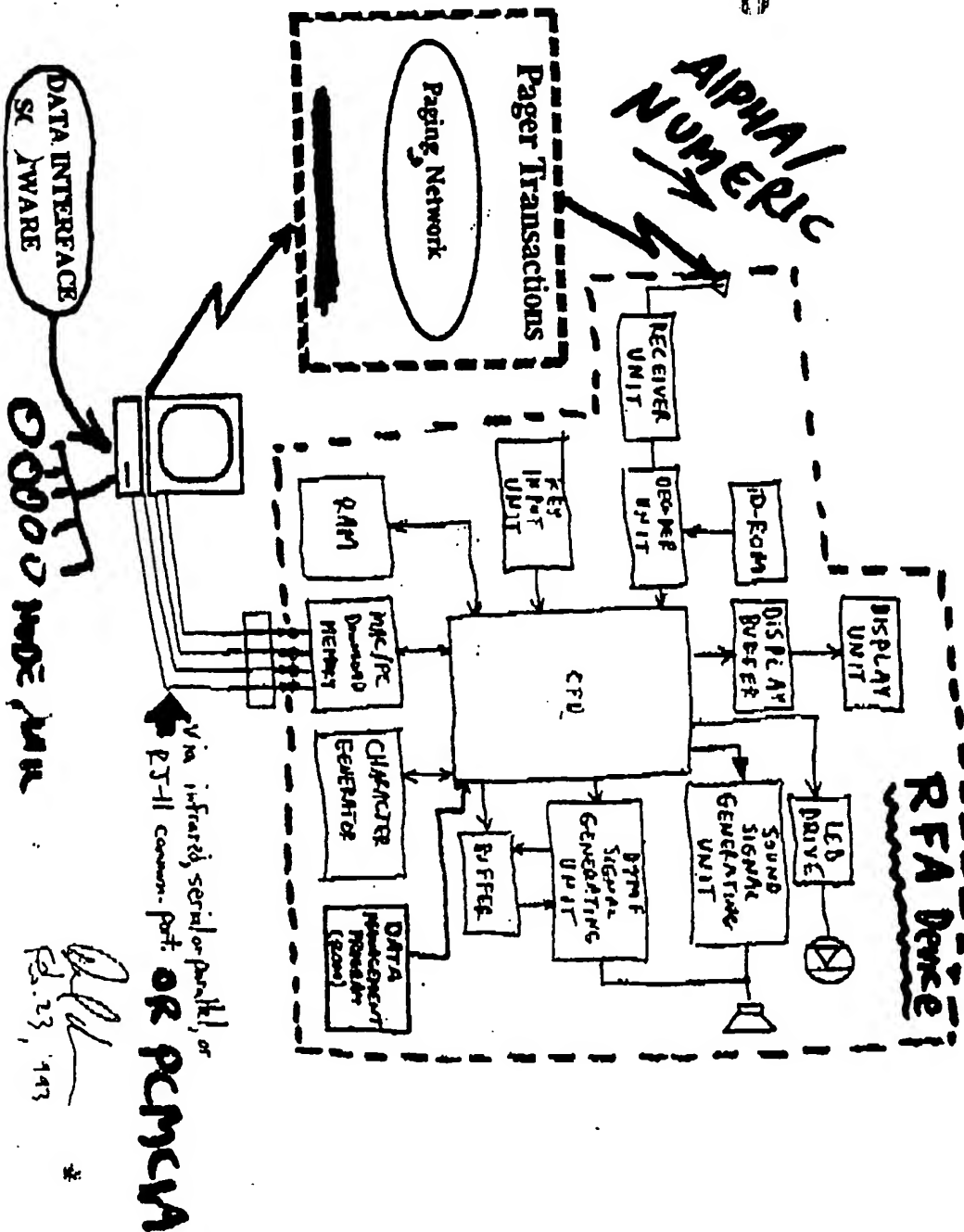


John
Jul. 17, 1993

X *James B. Henderson*
1-17-93

05

APPENDIX F

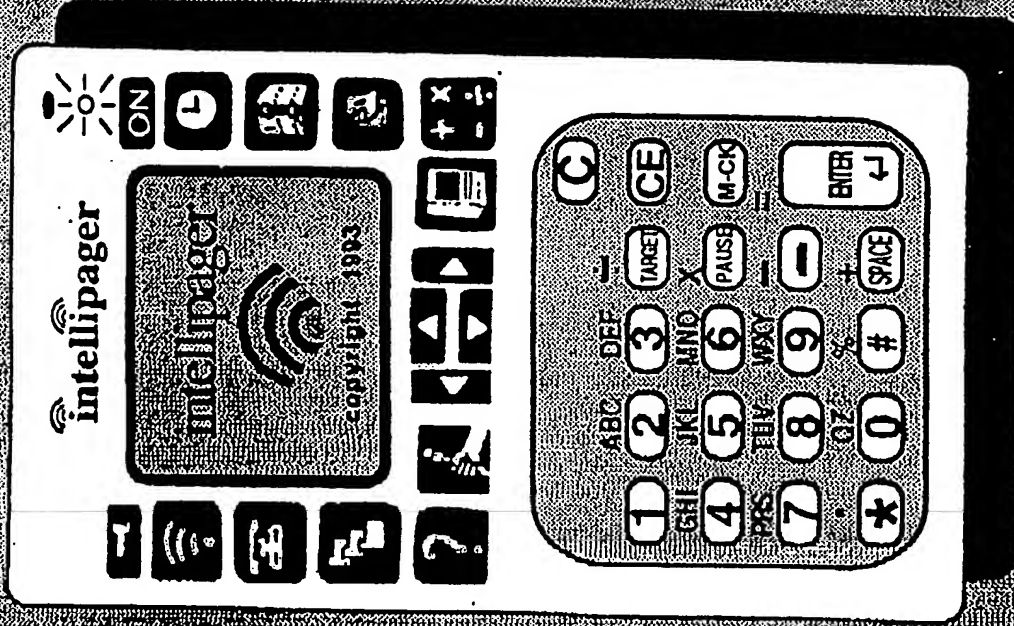


X Suzanne B. Henderson
2-03-93

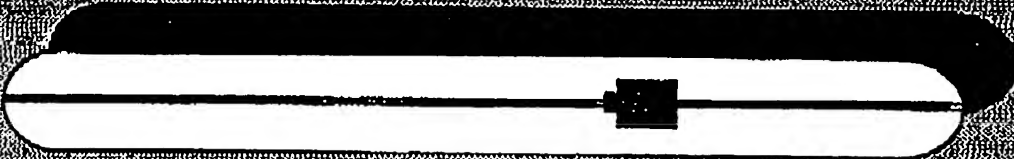
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APPENDIX G

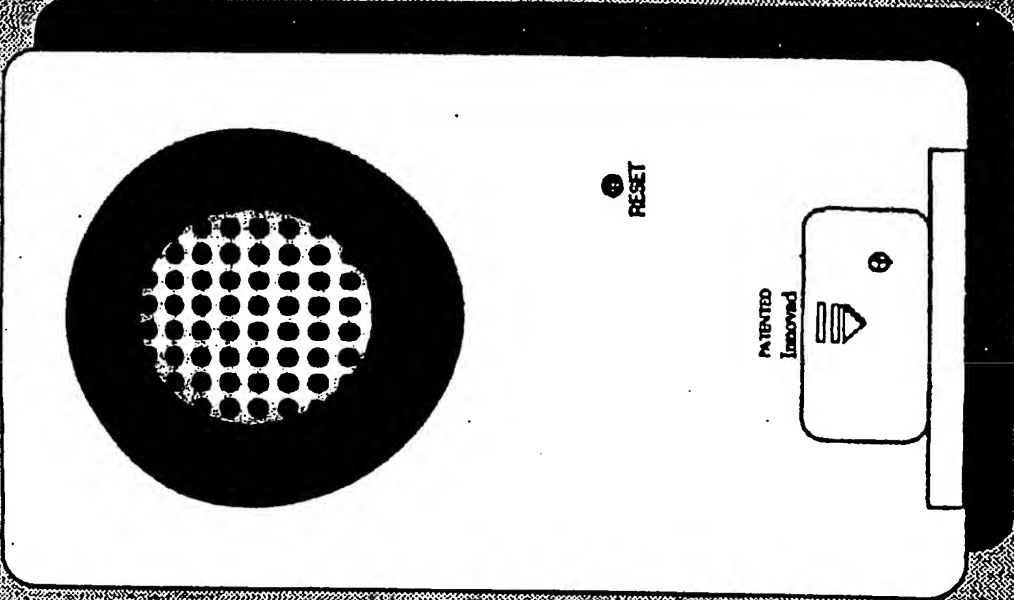
February 23, 1993



Front



Side



Back

intellipager product view

APPENDIX H



REAL TIME STRATEGIES

(516) 939-6655

960 S. Broadway
Suite 118C
Hicksville, New York 11801

FAX (516) 939-6189

March 12, 1993

Mr. Dan Henderson
33300 Mission blvd.
Suite 131
Union City, CA 94587

Dear Mr. Henderson,

Thank you for your interest in Real Time Strategies and its products. As you will see from the enclosed product literature, RTS provides equipment ranging from hand-held data entry devices, up to radio paging networks.

Real Time Strategies is a telecommunication product manufacturing company which builds software intensive products which are easily modified to meet the specific requirements of our customers. The founders of RTS have more than 35 years of experience in the design, development and support of complex, comprehensive, radio paging, voice mail, cellular radio, telephone answering, remote diagnostic, data and voice communication products.

After you have had an opportunity to review the enclosed information, feel free to contact our offices to review these products in more detail. If you would like a copy of the Pagentry™ operations guide in order to learn more about this product, please let us know. Thank you for your inquiry regarding Real Time Strategies.

Sincerely,

Spencer Kravitz
Executive Vice President

SK/jmb
enclosures

APPENDIX I

LICENSE AGREEMENT for US PATENT 4,490,579

This Agreement is made and entered into at Union City, California by and between Daniel A. Henderson, a US citizen located at 33300 Mission Blvd. #131, Union City, California, 94587 dba "Innovad" (Licensee), and Vanig Godoshian, a US citizen located at 2500 Pontiac Dr., Sylvan Lake, Michigan, 48320 (Licensor).

Whereas, Licensor is the sole owner of all right, title, and interest in and to the United States Patent number 4,490,579, entitled "Auto-Dialing Pager Receiver";

Whereas, Licensee desires to obtain an exclusive license and assignment rights of said patent;

Now, therefore, in consideration of the promises above and the mutual covenants and agreements hereinafter, the parties agree as follows:

DEFINITIONS

1. The "licensed patent" refers to the United States Patent number 4,490,579 entitled "Auto Dialing Pager Receiver".
2. The terms "licensed pagers" and "pagers" refer to any acoustically coupled personal communication device, dialer, or card which is programmable by a radio signal transmission to generate one or more DTMF numbers as disclosed in US patent 4,490,579.

LICENSE GRANT / ASSIGNMENT RIGHTS

4. Licensor hereby grants to Licensee an exclusive, transferable right under the Licensed Patent to make, use, and sell licensed pagers throughout the United States, and its territories and possessions, for a term of five years (60 months) from the date of execution of this agreement.

AUTOMATIC ASSIGNMENT OF PATENT

5. Upon receipt by Licensor of \$ [REDACTED] within the term of this agreement, Licensor will grant an irrevocable assignment of ownership of the licensed patent without delay. Receipt by the Licensor of \$ [REDACTED] Dollars) constitutes payment in full and Licensee will have no further duty to pay royalties or fees to Licensor. If a total of \$ [REDACTED] is not received by the Licensor during the term of this agreement, then rights to automatic assignment will be revoked at the end of the term of this Agreement and the license will revert to a non-exclusive license for the remaining life of the patent.

CONSIDERATION

6. In consideration for the license granted above, Licensee shall pay to Licensor an initial royalty payment of [REDACTED] U.S. Dollars) payable upon execution of this agreement.
7. Additional royalty payments will be made on a semi-annual basis at a rate of [REDACTED] % of all U.S. Pager sales within the term of this agreement.
8. A licensed pager will be considered "sold" when billed, except that upon the termination of this License Agreement, all inventory of the Licensee of licensed pagers existing on or prior to the date of such termination shall be considered sold. Royalties paid to Licensor of returned licensed pagers shall be non-refundable to Licensee.

SUB-LICENSING

9. Licensor agrees and undertakes that Licensee may sub-license the rights herein granted and that Licensor will authorize any other person, firm, or corporation to make, use, or sell the inventions herein licensed so long as the agreed upon ~~royalty~~ royalty is paid to Licensor.

ACCOUNTING

10. Licensee agrees to make and keep full and accurate books and records showing the sales of licensed dialers sold under the license herein granted in sufficient detail to enable royalties payable to be determined.
11. Licensee further agrees that Licensor shall be permitted to inspect such books and records from time to time, during regular business hours, to verify the royalty reports and payments provided by this agreement.
12. For the purpose of computing royalties under this Agreement, the year shall be divided semi-annually, beginning January 1 and July 1 of each year period. Within ninety days after the end of each semi-annual period, Licensee shall submit a written report to Licensor setting forth the number of licensed pagers which have been sold during the preceding six month period. Licensee shall remit at that time to Licensor at Licensor's designated address the full amount of royalties due for such six month period.
13. In the event of termination of this Agreement for any reason whatsoever, Licensee agrees to permit Licensor or its agent to inspect all said records and books of Licensee and to investigate generally all transactions of business carried on by Licensee pursuant to this Agreement and the license hereby granted, for a period of six months after such termination.

ENFORCEMENT

14. Licensor will cooperate fully in supplying any information required for enforcement of the patent against companies infringing the patent. Licensee shall bear all costs and legal fees associated with enforcement of the patent and shall bear all direct expenses incurred.

DURATION

15. This Agreement shall become effective on the date of execution by Licensee, and unless sooner terminated or extended as otherwise herein provided, shall remain in effect for five (5) years.

TERMINATION

16. This Agreement may be terminated by Licensor if Licensee shall at any time make default in the payment of any royalty as herein provided, or shall commit any breach of any covenant or agreement herein contained, or shall make any false report, and shall fail to remedy any such default or breach within thirty (30) days after written notice hereof by Licensor.

ARBITRATION

17. Every dispute, difference, or question arising between the parties in connection with this Agreement or patent or any clause or the construction thereof, of the rights, duties, or liabilities of either party shall be settled by arbitration in Union City, California in accordance with the rules of the American Arbitration Association (including Patent Arbitration Rules), and judgement upon the award rendered by the Arbitrator may be entered in any court having jurisdiction thereof.

SEVERABILITY

18. Both parties hereby expressly agree and contract that it is the intention of neither party to violate any public policy, statutory or common laws; that if any sentence, paragraph, clause or combination of the same is in violation of any state or federal law, such sentences, paragraphs, clauses, or combinations of the same shall be inoperative and the remainder of this Agreement shall remain binding upon the parties hereto. It is the intention of both parties to make this Agreement binding only to the extent that it may be lawfully done under existing state and federal laws.

NEGATION OF AGENCY AND SIMILAR RELATIONSHIPS

19. Nothing herein contained shall be deemed to create an agency, Joint Venture, or Partnership between the parties hereto.

EXISTENCE OF PRIOR AGREEMENTS

20. Licensor warrants that no other license agreements or other similar business arrangements relating to the licensed patent are in effect during the term of this agreement.

ENTIRE AGREEMENT; MODIFICATIONS

21. This Agreement constitutes the entire agreement and understanding between the parties and supersedes all prior agreements and understandings with respect to the licensed patents whether written or oral. No modification or claimed waiver of any of the provisions hereof shall be valid unless in writing and signed by authorized representatives of the party against whom such a modification or waiver is sought to be enforced.

ASSIGNABILITY

22. This Agreement and the rights and powers created herein may be assigned in whole or in part by the Licensee.

MAINTENANCE FEES

23. Licensor agrees to pay all patent license fees in a timely manner as required by the US Patent & Trademark office and warrants that all necessary fees to keep the patent in force have been paid as required.

GOVERNING LAW

24. This Agreement shall be construed and enforced, and the legal relations created herein shall be determined, in accordance with the laws of the State of California.

NOTICE

25. All notices provided for in this Agreement shall be given in writing and shall be effective when either served by a personal delivery, or deposited, postage prepaid, in the United States Registered or Certified Mail addressed to the parties at their respective addresses hereinabove set forth, or to such address or addresses as either party may later specify by written notice.

In witness whereof, the parties hereto have executed this Agreement in duplicate, each copy of which shall for all purpose be deemed an original.

VANIG GODOSHIAN

By Vanig Godoshian

Date: March 19, 1993

STATE OF MICHIGAN
COUNTY OF Oakland

BEFORE ME, the undersigned authority, on this day personally appeared Vanig Godoshian, who executed this Agreement for the purposes therein described.

Deborah M. Thompson

Deborah M. Thompson
Notary Public in and for
State of Michigan.

My Commission Expires: 1/29/95

DANIEL HENDERSON

By [Signature]

Date: 3/10/93

STATE OF CALIFORNIA
COUNTY OF ALAMEDA

BEFORE ME, the undersigned authority, on this day personally appeared Daniel A. Henderson, who executed this Agreement for the purposes therein described.

[Signature]

Notary Public in and for
State of California

March 30 1993

DANIEL A. HENDERSON
SUSANNE W. BILLING
050018014
UNION CITY, CA 94587

050018014
UNION CITY, CA 94587

888

18-21/1220

Pay to the
Order of

Vanig Godoshian

3/18 1993

\$

Dollars

 **First
Interstate
Bank**

First Interstate Bank
of California #012
1827 A Street
P.O. Box 620
Hayward, CA 94543-0620

For Patent 4,490,579 License Agreement

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APPENDIX J

1304 14

NEC - North America

516.

4/9/93

- Spoke w/ JIM MARION - Manager for the pager Engineering Dept. He said ~~he~~ he was not enthused about DTMF due to problems with access thru PAX's, blocked pay phones, etc. No one ever really discussed idea very seriously. He offered to ~~fun~~ interference for me - said that only those people/co's who were persistent with Japan were successful in creating a J.V. etc. as advice to me. Also, usually J.V.'s were typically with some sort of cross-license arrangements. He is calling Yoshimi Tomizawa - Shu (recently married @ 516-753-7000 (fax) head of legal department & speaks English. Pointed out that ~~the~~ this was not intended to be adversarial - procedure regarding it and generally NEC was reluctant to discuss much with outsiders. Yoshimi will call me back after JIM has chance today to make contact and smooth out for me. Also gave me name of Fernando GOMEZ, Director of Subscribing Products - Americas Pricing Product Division - (407) 364-2746 (NY) who may be of assistance in directing my call to appropriate decision makers.

I discussed only the DTMF part of our product and indicated that I had developed the one-off dialer. He and I both had same idea RE. preprogrammed radia for radio promotions, incidentally, and he thought my 1-off product was a great idea.

He went on to say that if a joint venture or license did not seem feasible, that I may be able to purchase the NEC chipset for a radiopaging receiver to implement into my own product or recommended that I contact Motorola @ their Boynton Beach, FL facility where they sell a preassemble board (radio receiver) - (407) 364-2748 that may allow an interface with other circuitry in our devices.

Very cordial, helpful. Welcomed me to call again if I have any difficulties.

4/22/93 Spoke with Yoshimi Tomizawa-Shu. She informed that they must have my signature on their doc. before we can proceed. I am waiting for it by mail.

APPENDIX K

AG-8

Innovad

MUTUAL NON-DISCLOSURE AGREEMENT

THIS AGREEMENT, made April 13, 1993, by and between INNOVAD, having an office at 33300 Mission Blvd, Ste. 131, Union City, CA 94587, and Mr. Drew Traver acting as agent for Doctor Design, Inc. having an office at 5415 Oberlin Drive, San Diego, CA 92121; and

WHEREAS, the parties wish to discuss the possibility of a design engineering contract between INNOVAD and Doctor Design, Inc.; and

WHEREAS, in connection with such discussions the parties will exchange certain information specifically relating to the auto-dialling paging receiver which is confidential, proprietary information of the disclosing party; and

WHEREAS, the parties wish to ensure that all such information is treated with special care to protect its confidential, proprietary nature,

NOW THEREFORE, in consideration of the mutual promises and covenants herein contained, the parties agree as follows:

- I. Each party agrees that it will not disclose any confidential information of the other, as specified in this paragraph 1, subparagraphs A through D, to any person, or entity. If such information is in tangible form, it shall be returned to the disclosing party upon request.
 - A. All matters, information and plans, as well as the fact that discussions are taking place, and the identity of the parties involved, shall hereafter be held in confidence, treated as confidential information proprietary to the disclosing party and shall not be disclosed in whole or part to others, or reproduced or copied in whole or in part for any purpose, without the express written consent of the disclosing party.
 - B. Each party will regard and preserve as confidential all information related to the business of the other party. Each party shall not without first obtaining the written consent of the other, disclose to any person, firm or enterprise, or use for its benefit, any information relating to the pricing, methods, process, financial data, lists, apparatus, statistics, programs research, development or related information of the other party, concerning past, present or future business activities of the other party.
 - C. Information shall not be deemed "confidential" for purposes of this paragraph 1 to the extent, that such information (1) was acquired by a

party hereto before the contemplated discussions and when such party was under no obligation to keep such information confidential, (2) is or becomes publicly known through no wrongful act of a party hereto, or (3) is received from a third person or entity who is legally entitled to possession of such information.

- D. Each party further acknowledges and agrees that, in the event of a threatened breach of active breach by it of the provisions of the Agreement, the other party will have no adequate remedy for damages, and, accordingly, shall be entitled to an injunction against such threatened breach. However, no provision in this Agreement shall be construed as a waiver or prohibition of any other legal or equitable remedy for threatened or active breach hereof.
2. Neither party shall advertise, market or otherwise make known to others confidential information, as described in paragraph 1, learned from discussion, occurring pursuant to this Agreement, in a manner which attributes the information to or associates the information with the name of the other party, or its affiliated companies, partners, investors, subsidiaries, licensees, or any other entities.
3. Nothing contained in this Agreement shall be construed as granting or conferring upon a party hereto any proprietary right, by license or otherwise, in any confidential information disclosed by the other party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their authorized persons as of the date set forth below.

For NOVAD:

By: [Signature]

Title: Owner

Date: 4/20/93

For Doctor Design, Inc.

By: [Signature]

Title: Marketing Manager

Date: 4/20/93

NON-DISCLOSURE AGREEMENT 2 of 2

TEL NO: FAX # 619 457-1169

APR-20-'06 TUE 09:20 ID:DR DESIGN

APPENDIX L

NEC

NEC America, Inc.

NEC America, Inc.
8 Old Sod Farm Road
Melville, New York 11747-3112
Tel. 516-753-7000
Fax 516-753-7041

7050

7663

April 23, 1993

Mr. Dan Hendersen
33300 Mission Boulevard
Suite 131
Union City, California 94587

Re: Submission of your idea to NEC America, Inc.

Dear Mr. Hendersen:

Per our telephone conversation last week, enclosed please find an agreement for your signature and notarization. NEC America, Inc. will not be able to engage in any discussion with you with respect to your idea until and unless you have executed, notarized and returned to my attention, the enclosed agreement.

Thank you very much for your interest in NEC America, Inc.

Sincerely,

Yoshimi Tomizawa-Shu
Yoshimi Tomizawa-Shu
Attorney

X 7050

Mutual Non-Disclosure

Idea Submission Policy and Agreement

We understand that you have a new idea which you think will be of interest to NEC America, Inc. (the "Company"). You should realize that an idea which is new to you may be old to us or may be in the public domain. Thus, we have found that good business practice requires a full explanation of the condition under which we can review your idea.

1. Nonconfidential Disclosure

The Company cannot agree to hold your new idea in confidence because it may be helpful to disclose the idea to others for evaluation, and because agreements to hold in confidence have been found to entail other obligations which the Company cannot accept. It is understood, therefore, that no confidential relationship is entered into by reason of the fact that the Company is considering your submission.

2. No Obligations

Any submission is made on the understanding that the Company shall give it such consideration as it merits in the sole judgment of the Company. The Company assumes no obligation to evaluate or pursue the idea, and is under no obligation to reveal to you any information of the Company. Also, the Company has no obligation to return the submitted materials to you.

3. Title in New Idea

The Company will consider your new idea submission only at your request, and then only with your assurance that to the best of your knowledge you are the sole originator of the new idea, that you own it and that you have the legal right to negotiate with the Company concerning it.

4. Limited Rights to the New Idea

It is agreed that in protecting your new idea you shall rely solely on your rights under the patent, trademark, and copyright laws, and that consideration of your submission by the Company shall in no way impair the Company's right to contest the validity of your patent, trademark, or copyright.

5. No Compensation

No agreement for compensation shall be implied by the consideration or review of your new idea. Should the Company decide after due consideration that your idea

is novel and previously unavailable to the public or the state of the art and of use to it, the extent of your compensation will be determined by a written agreement between yourself and the Company.

Acceptance of the Policy and Agreement

I have read the Idea Submission Policy set forth above and I agree to accept each of the conditions contained in the Policy and Agreement.

Signature _____
Address: _____
City: _____
State: _____
Telephone: _____
Date: _____

State of _____

County of _____

Date: _____

I hereby certify that _____, personally known to the undersigned, appeared before me and acknowledged that he signed the attached submission as his free, voluntary act.

Notary Public

My commission expires:

APPENDIX M

Innovad

Innovative Development & Manufacturing

April 27, 1993

Mr. Drew Traver
Doctor Design Inc.
5415 Oberlin Drive
San Diego, CA 92121-1716

Dear Drew:

Thank you for the hospitality you showed me during my visit. You were most helpful in acquainting me with the facility and the services which Doctor Design provides. Please give my regards to Hjamid.

I enjoyed visiting with you and look forward to developing a good working relationship with Doctor Design in the near future.

The patent information Marco requested was sent out today along with a brief letter. Please let me know if you require any further information.

After everyone has had a chance to review the materials and discuss our ideas internally I would like your help in responding with a proposal which will help get this project funded.

I look forward to a mutually rewarding relationship with you and Doctor Design Inc..

With Best Regards,



Dan Henderson

DAH:sbh

5/11/00

P.S. Thanks for Bob Hottel's #. We had a very productive discussion today that may lead to some interesting business opportunities. Thanks again!

Skip-Diving

Jack Robbins
Sunrise-Walnut Creek
or 690 Ignacio Blvd.
or 190



APPENDIX N

AG 117

Innovad
MUTUAL NON-DISCLOSURE AGREEMENT

THIS AGREEMENT, made April ²⁸~~25~~, 1993, by and between INNOVAD, having an office at 33300 Mission Blvd. Ste. 131, Union City, CA 94587, and Mr. Drew Traver acting as agent for Robert Hutto having an office at ~~5415 Oberlin Drive, San Diego, CA 92121~~ and 3109 Evening Way L.J. 92037

WHEREAS, the parties wish to discuss the possibility of a design engineering contract between INNOVAD and Robert Hutto and

WHEREAS, in connection with such discussions the parties will exchange certain information specifically relating to the auto-dialing paging receiver which is confidential, proprietary information of the disclosing party; and

WHEREAS, the parties wish to ensure that all such information is treated with special care to protect its confidential, proprietary nature.

NOW THEREFORE, in consideration of the mutual promises and covenants herein contained, the parties agree as follows:

1. Each party agrees that it will not disclose any confidential information of the other, as specified in this paragraph 1, subparagraphs A through D, to any person, or entity. If such information is in tangible form, it shall be returned to the disclosing party upon request.
 - A. All matters, information and plans, as well as the fact that discussions are taking place, and the identity of the parties involved, shall hereafter be held in confidence, treated as confidential information proprietary to the disclosing party and shall not be disclosed in whole or part to others, or reproduced or copied in whole or in part for any purpose, without the express written consent of the disclosing party.
 - B. Each party will regard and preserve as confidential all information related to the business of the other party. Each party shall not without first obtaining the written consent of the other, disclose to any person, firm or enterprise, or use for its benefit, any information relating to the pricing, methods, process, financial data, lists, apparatus, statistics, programs research, development or related information of the other party, concerning past, present or future business activities of the other party.
 - C. Information shall not be deemed "confidential" for purposes of this paragraph 1 to the extent, that such information (1) was acquired by a

party hereto before the contemplated discussions and when such party was under no obligation to keep such information confidential, (2) is or becomes publicly known through no wrongful act of a party hereto, or (3) is received from a third person or entity who is legally entitled to possession of such information.

D. Each party further acknowledges and agrees that, in the event of a threatened breach of active breach by it of the provisions of the Agreement, the other party will have no adequate remedy for damages, and, accordingly, shall be entitled to an injunction against such threatened breach. However, no provision in this Agreement shall be construed as a waiver or prohibition of any other legal or equitable remedy for threatened or active breach hereof.

2. Neither party shall advertise, market or otherwise make known to others confidential information, as described in paragraph 1, learned from discussion, occurring pursuant to this Agreement, in a manner which attributes the information to or associates the information with the name of the other party, or its affiliated companies, partners, investors, subsidiaries, licensees, or any other entities.
3. Nothing contained in this Agreement shall be construed as granting or conferring upon a party hereto any proprietary right, by license or otherwise, in any confidential information disclosed by the other party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their authorized persons as of the date set forth below.

For INNOVAD:

By: [Signature]

Title: Owner

Date: 4/28/93

For Positive Technologies

By: [Signature]

Title: President

Date: 4/28/93

APPENDIX O

[54] TELEPHONE ANSWERING SYSTEM WITH PAGING FUNCTION

[75] Inventor: - Kazuo Hashimoto, Tokyo, Japan

[73] Assignee: Hashimoto Corporation, Tokyo, Japan

[21] Appl. No.: 841,097

[22] Filed: Mar. 18, 1986

[30] Foreign Application Priority Data

Mar. 19, 1985 (JP) Japan 60-55225

[51] Int. Cl. H04Q 7/04

[52] U.S. Cl. 379/57; 379/51; 340/825.44

[58] Field of Search 179/2 E, 2 EA, 2 B, 179/18 BE, 18 BF, 84 UF, 2 G, 603; 370/61; 340/825.44, 311.1; 379/57, 51

[56] References Cited

U.S. PATENT DOCUMENTS

4,065,642 12/1977 McClure 379/77
4,072,824 2/1978 Phillips 379/57
4,178,475 12/1979 Taylor et al. 179/2 EC
4,313,035 1/1982 Jordan et al. 179/18 BE

4,336,524 6/1982 Levine 340/311.1
4,682,148 7/1987 Ichikawa et al. 340/311.1

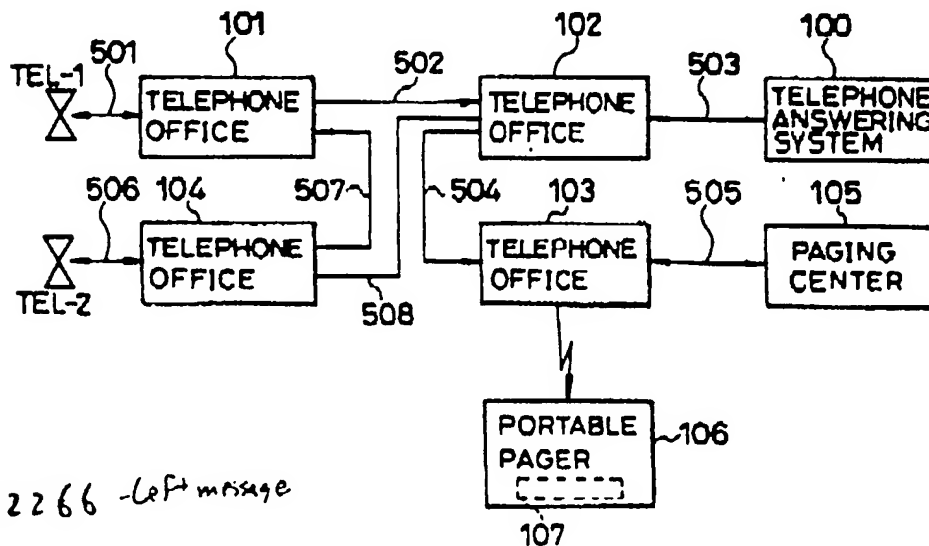
Primary Examiner—Robert Lev

Attorney, Agent, or Firm—Lowe, Price, LeBlanc, Becker & Shur

[57] ABSTRACT

A telephone answering system with paging function is adapted to transmit a prerecorded outgoing message to a calling party through a closed loop of telephone lines established upon reception of a telephone calling signal, and record an incoming message from the calling party after the outgoing message is transmitted. The system operates to receive a signal representative of the caller's telephone number sent from the calling party through the telephone lines to store the same signal in a memory, and then automatically and temporarily release the closed loop, and thereafter reestablish the closed loop for calling a preset telephone number of a paging center. Further, the system transmits the stored signal representing the caller's telephone number to the paging center through the telephone lines upon reception of an answer from the center.

6 Claims, 5 Drawing Sheets



oil 81 3

• 342/2266 - left message

34223749

APPENDIX P

AT&T's
Customer Information Center

2855 N. Franklin Road
Indianapolis, IN 46219-1385

FAX: (317) 322-6549

TO: NAME DANIEL HENDERSON

LOCATION _____

PHONE NUMBER (510) 487-6102

FAX NUMBER (510) 487-2295

FROM: NAME JERRY SAEGOLD

LOCATION AT&T / CTC

PHONE NUMBER 317 322 6491

NUMBER OF PAGES 3

DATE _____

(INCLUDING COVER SHEET)

Please contact Sender if transmission is not completed.

COMMENTS:



IND 83-061
11-8-93

15109872288

MAY-02 10:05

ACCESSING THE DATABASE

To log onto the CJC On-Line Catalog, you must have an assigned Login ID. If you do not have a Login ID, please call 317-322-6491.

To log on to the database, follow the instructions below. The CJC Catalog will automatically be accessed when login is complete.

DATAKIT Users

At the Destination prompt, enter:

ip/cjc/nlk1.telnet...sumids You will be prompted for your login

Print-Up Users

(800)445-6759

Upon connecting, you will be prompted to enter your login ID, password, and terminal type. Acceptable terminal types include 4410, VT100, 5425, ANSI, TTY, KayPro, TEL, PT510 and many others. If you have questions about your terminal, please call 317-322-6491.

Be sure your Caps Lock and Num Lock keys are off!

ENTERING TO KNOW THE SYSTEM

After logging in, the first screen display is the main function screen. You begin your keyword search at this screen and return to this screen to do new searches. At the prompt you type in search terms. To illustrate, let's assume we are searching for document listings about electronic mail. After typing in the words, press the RETURN key.

SEARCH FOR DOCUMENTS

Enter search terms (up to 80 characters):

Press RETURN to search.

The system will locate all documents that have both the word electronic and mail in either the title or description. The key words do not have to be in specific order, nor even in the same sentence. In this instance, the system has located six document listings that have the words electronic and mail. (If there are more listings than the screen can hold, pressing the RETURN key repeatedly will automatically scroll you forward through the listings.)

To see the full record for a document, simply type the record number (1-6 in the example above) followed by the return key.

Note: The selections below the dashed line reflect the commands you can use to maneuver through the screens. See opposite page for descriptions of commands.

All commands must be followed by the RETURN key.

Full record display showing document details.

The full record screen typically includes title, price, page count (if available), issue number, issue date, security class, stock/non-stock classification, and a short synopsis (if available). To return to the previous screen, type "-" and press the return key.

To start a new search, type a period "." to return to original screen.

Electronic mail screen showing document details.

In the previous example, the phrase electronic mail was used. If we had typed electronic only, the screen would have been like the one to the left, retrieving 814 documents for viewing. The set can be reduced by adding additional terms—one or more at a time—and pressing the return key after each.

LOGGING OFF

Type q followed by a carriage return anywhere in the system to log out. The system will ask for any comments you might have about the On-Line Catalog. If you choose to comment, typing a PERIOD "." on a separate line will end your session. If you choose not to comment, you can just type the PERIOD "." followed by the return key.

COMMANDS

Return to main screen to start a new search.

Move forward/back in display. The sign can be followed by a number to move forward or backward a specific number of screens. Press the PF7 key will also advance you in the display.

Modify present display. This command will take you back to screen #4 (see above) where you can reduce the set by adding key words.

Print present display...this command does not work

Type in record number and press return to see full display of item.

Give additional help. This command illuminates a screen that explains the commands at the bottom of the screen and explains how to exit the system.

Put up brief displays. This command is used when you are looking at a full record and would like to return to the abbreviated listings of documents

Quit

Each screen

All commands must be followed by the RETURN key.

HELP HINTS

Use the truncation symbol "?" to retrieve all key words beginning with a specific string of characters. For example, the term *admin?* will return all key words starting with *admin* including *Administration*, *administration*, *Administrator*, etc.

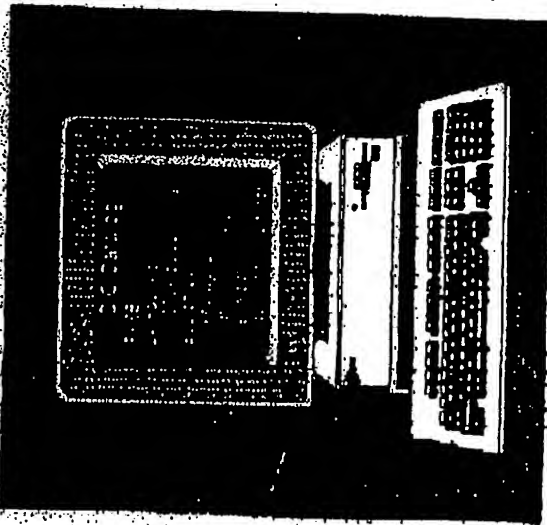
The *^* symbol can also be used as a wildcard character where spelling of a term is uncertain. For example, *man^* will return *man*, *men*, *man*, *men*, etc.

Always use the truncation symbol when searching by document number, even when the number is truncated. For example, *555006^* will return all document numbers beginning with 555006, including 555006211 and 555006211AD01.

Use the *^* symbol to search for a range of numbers. For example, *25500000^55500000* will return all document numbers that have 7 or more leading zeros.



CUSTOMER INFORMATION CENTER ON-LINE CATALOG



Welcome to AT&T's Customer Information Center (CIC) On-Line Catalog. We hope that you will find the On-Line Catalog easy and convenient to use.

The CIC On-Line Catalog is comprised of over 380,000 document listings including AT&T Practices, product manuals, engineering drawings, user guides, installation manuals, books, brochures, newsletters, telephone directories, and many miscellaneous items.

This guide provides general information about the CIC On-Line Catalog, as well as step-by-step instructions on using the database to find exactly what you need. You will find the On-Line Catalog to be easy to use once you've mastered just a few simple commands.



Customer Information Center On-Line Catalog

To receive a Login ID, call
1-800-432-6600
please have your
billing information available

For Technical Assistance, please call
1-317-322-6491

APPENDIX Q

DOCTOR DESIGN INC.
Engineering Services Quotation

This Engineering Services Quotation is provided by Doctor Design, Inc. (hereafter referred to as "DDI") to Innovad (hereafter referred to as "Company").

Statement of Work

DDI shall be engaged by Company as an independent contractor. This engagement consists of quickly prototyping a low functionality unit of Company's intelligent pager product (hereafter referred to as "Project"). DDI shall complete the Project to the requirements of this Statement of Work and Technical Specifications (if supplied) and/or other information provided by Company. If desired, Company shall provide a detailed Statement of Work and Technical Specification prior to the start of work. The Fees and Schedule quotations are based on the following assumptions:

- DDI will modify an off the shelf pager to incorporate an auto dialer.
- Design will have a single button for dialing.
- DDI will locate off the shelf packaging for prototype unit.
- DDI will write software need to support auto dialing.
- Three assembled and tested prototypes will be delivered to Company, one assembled and tested prototype and one bare printed circuit board will be retained by DDI.

Company Deliverables

Company shall provide all unique equipment required for prototype testing and debug for the Project. This will include:

- Four (4) off the shelf pager units to be modified.
- Activation for all pager units.
- Technical contact for questions

Company shall provide DDI with an Acceptance Test Plan (ATP) within 2 weeks after start of project. Prototype or production parts which pass the ATP shall be deemed accepted by Company.

DDI Deliverables

PRINTED CIRCUIT BOARDS -- DDI will deliver provide three (3) tested and working prototypes in enclosures to Company.

Fees and Schedule

This proposal is good until 5/28/93

Schedule:	Start Project	0 weeks ARO	Net 0	\$ 9,000
	Design Review	2 weeks ARO	Net 15	\$ 8,000
	Deliverables	5 weeks ARO	Net 15	\$ 8,000
	Total Project NRE			\$25,000

Prototype estimate is detailed on the estimate worksheet contained in Exhibit A.

Prototype Estimate	2 weeks ARO	Net 0	\$ 3,000
--------------------	-------------	-------	----------

\$20k

* If actual prototype cost exceeds estimated cost, excess will be billed monthly Net 0. If estimated prototype cost exceeds actual cost, excess will be refunded at end of project.

** If any DDI technician time is used for prototype assembly, it will be billed at \$75 per hour.

*** Shipping cost of sending prototypes to Company will be billed directly to Company by shipper.

**** Payment terms are subject to credit approval.

***** Work will not begin until start payment is received. If DDI agrees to begin work with a PO# and not a start payment, work will begin three (3) working days after receipt of PO.

All payments received after the payment due date will accrue interest at the rate of one and one-half percent (1½%) per month.

Changes

DDI will use its best efforts to implement any changes and/or modifications to the technical specification after start of the Project. When Company requests a change, the Project will be placed on hold and investigation into the amount of time required to make changes will be performed on an hourly basis at the rate of \$85 per hour. A written estimate covering extra design NRE, schedule changes, additional prototype costs and estimated recurring costs will be given to Company at the end of the investigation. Upon receipt of Company's written acceptance or rejection, DDI will again start working on a fixed cost basis. All milestones in the current fixed contract will adjust for the amount of time spent in investigation and waiting for Company's acceptance or rejection. DDI shall

May 11, 1993

not be responsible for any delays caused by time spent investigating Company's requested changes or waiting for Company's response.

Warranty

DDI will warrant that the design and final product is free from defects and meets technical specifications as measured by the ATP for 90 days from the date of delivery to Company. This warranty does not apply if modifications are made that were not designed by DDI. If Company has isolated a repeatable problem in DDI designed sections, DDI will fix the problem at no charge to Company. Time invested by DDI to help Company isolate problems will be billed at \$85 per hour. This charge will apply regardless of whether the problem lies in DDI designed sections or in sections designed by others. Company will pay for any and all shipping charges.

Termination

This project may be terminated by written notice from the Company. Should the project be terminated after an authorization to start work, all project fees up to and including the next project milestone and any prototype expenses incurred are due and payable.

Ownership of Project

DDI agrees that all technology, schematics, specifications, designs and any other deliverables under this agreement are the property of Company upon payment in full, within terms, of all milestone, prototype expenses and other invoices submitted by DDI under this agreement. Company agrees that all technology, schematics, specifications, designs and any other deliverables under this agreement are the property of DDI until all invoices have been paid in full; this is in addition to any other remedies available to DDI.

Relationship of the Parties

The parties intend that DDI shall be an independent contractor and not an agent or employee of Company. DDI adheres to all laws and ethical standards applicable to professional engineers and performs in a manner consistent with generally accepted procedures for the profession. DDI acknowledges this design is "work for hire" under the laws of the State of California, and DDI, or its employees or sub-contractors retain no ownership rights to the design.

Severability

If any provision of this Agreement shall be held to be invalid, the other provisions shall remain enforceable unless deletion of the invalid material will defeat the essential purpose of the parties as expressed in this Agreement.

May 11, 1993

Indemnity

Company agrees to indemnify, hold harmless and defend DDI, its employees and subcontractors from all liability for any loss, damage or injury to persons or property arising from or related to the performance of this agreement whether liability be based on strict liability in connection with the design, manufacture or use of the System, including without limitation all consequential damages whether or not attributable to DDI, its employees or subcontractors. The terms of this agreement shall bind and inure to the benefit of the parties and their heirs, legal representatives, successors and assigns.

Authority

The parties executing this Agreement on behalf of DDI and Company warrant that they have the authority to enter into this Agreement and to bind their respective company to all of the terms and conditions of this Agreement.

Governing Law

This Agreement shall be governed and construed by and in accordance with the laws of the State of California.

Arbitration

Any dispute relating to the interpretation or performance of this agreement shall be resolved at the request of either party through binding arbitration. Arbitration shall be in accordance with the rules of commercial arbitration of the American Arbitration Association before a single arbitrator in San Diego, California. Judgment upon any award by the arbitrators may be entered by the state or federal court having jurisdiction. The parties intend that this agreement to arbitrate be irrevocable.

Company

Company

Name (Print)

Name (Print)

Signature

Signature

Title

Title

Date

Date

May 11, 1993

EXHIBIT A

DDI Prototyping Methodology

DDI has included the following prototyping services:

- Printed Circuit Board Layout and Routing (PCB LAYOUT)
- Printed Circuit Board Fabrication (PCB FAB)
- Component Purchasing and Kitting (PURCHASING & KITTING)
- Printed Circuit Board Assembly (ASSEMBLY)
- Management and Expediting of all of the Above Services

WHAT WE NEED FROM THE CUSTOMER:

For best results, the customer should provide DDI with as much information regarding the eventual manufacturing process as is possible. This will allow us to design a printed circuit board which is easily transferred to the customer's manufacturing facility for volume production. Some of the information which would be helpful includes:

- Manufacturing Technology -- Through hole or Surface Mount?
- Hand Insertion or Auto Insertion -- What auto insertion rules to design to? *Motorola*
- Approved Vendors List -- What families and vendors of components are already on the customers approved vendor list? *Motorola*
- "Design for Manufacturability" -- Any other rules the customer wants followed in the design of the printed circuit board.

*Same as
Motorola*

DETAILS OF THE SERVICES

Printed Circuit Layout and Routing (PCB LAYOUT)

DDI will manage a third party firm which specializes in layout and routing. We will provide guidance in critical routing restrictions, layer count, manufacturing constraints and other guidelines necessary to successful completion. We will check photo-plots, and provide engineering feedback to the routing process.

At DDI's option, DDI may use in-house resources to layout and route PCB's. This service will be charged at industry-standard rates as a prototyping expense.

Printed Circuit Board Fabrication (PCB FAB)

DDI will select a vendor suited to the printed circuit board to be fabricated. We will evaluate number of layers, density, number of holes, line widths and spacing, size of board and turnaround time requirements, to select the vendor best suited to the project. We will expedite the manufacturing process and monitor the vendor's progress.

May 11, 1993

Component Purchasing, Receiving and Kitting (PURCHASING & KITTING)

DDI, using in-house resources, will order components from qualified vendors and distributors, receive components, and kit for assembly. We will also follow up on missing or late items with the vendors.

Printed Circuit Board Assembly (ASSEMBLY)

DDI will deliver the component kits to a third party firm which has been selected specifically to meet the requirements of the project.

STANDARD TERMS AND CONDITIONS FOR PROTOTYPING SERVICES**Charges:**

All outside prototyping costs have a 35% Gross Margin. This includes:

PCB Layout and Film

PCB Fabrication, Test and Tooling

Component Cost

Assembly and Tooling

Internal clerical costs for purchasing, receiving and kitting are billed at \$350.00/day.

Quantities:

Our standard terms and conditions for turnkey prototyping includes fabrication of 5 bare PCB's. Four (4) of these units will be assembled for testing. DDI will deliver 3 tested units to the customer, and retain one tested unit and one bare PCB for reference and support.

NOTE THAT THIS PROJECT HAS BEEN QUOTED WITH THE ASSUMPTION THAT 4 UNITS WILL BE TESTED. If additional units are requested, the additional engineering cost per board identified below is due upon delivery of working prototype boards. This engineering cost covers testing of additional boards. Cost of additional PCBs, components, and assembly will be based on actual prototype costs.

	STANDARD TERMS	SPECIAL TERMS
Bare Printed Circuit Boards Fabricated	5	_____
Total Assembled Units to be Tested	4	_____
Total Assembled Units to be Delivered	3	_____

May 11, 1993

AMOUNT TO BE ADDED TO ENGINEERING BID
FOR EACH ADDITIONAL UNIT DELIVERED

\$ _____

PAYMENT SCHEDULE FOR PROTOTYPING PROJECTS:

Because prototyping costs are derived from outside services, and are accrued rapidly on a quick turn project, the entire amount of the estimate is due up front to begin the prototyping. The refund or additional charges will be computed when the prototyping is completed, and these charges must be paid net 30 days.

GENERAL NOTES ON THE PROTOTYPING PROCESS:

The purpose of the prototype process is to validate and demonstrate a new hardware design. The "prototype" which emerges from this process will be a combination of the original design, and the changes which were made to the design in the process of hardware "debugging".

Depending on the complexity of the design, these design changes may involve programmable logic changes, "cut and jump" wiring changes, layout and routing changes and other mechanical constraint changes such as connector placement.

After the debug process, our customer typically submits the hardware design to various environmental tests. This will include UL/CSA/VDE/FCC/COLA and other regulatory and safety qualifications. The customer will also submit the hardware to integration with mechanical components such as chassis, power supplies, monitors...etc. The result of all of this testing typically includes changes to the Printed Circuit Board above and beyond the "wiring" changes isolated in hardware debug.

Our customer typically takes control of the engineering documentation for a product immediately after the prototype hardware is debugged. This allows the customer to be in control of the final revision of the printed circuit board (if another revision is required). At this time, the customer's manufacturing group can make final minor manufacturability changes, and incorporate any changes from the testing mentioned above.

If requested, DDI will be available to handle the PILOT MANUFACTURING run of boards. We can make the changes mentioned in the preceding paragraph. We will quote this, when requested, as a completely separate project. Depending on the quantity of units requested in this "second run", this quote will include all of the steps of the prototype project, plus engineering and technician time for debugging pilot units.

May 11, 1993

PROTOTYPING PROJECT ESTIMATE WORKSHEET

Customer Name: _____
Project Name: _____
Estimate Date: _____
Estimator: _____

PCB LAYOUT \$ _____ (1)

Assumes _ week layout _____

PCB FABRICATION \$ _____ (2)

Assumes _____

COMPONENT COST \$ _____ (3)

Assumes _____

ASSEMBLY \$ _____ (4)

Assumes _____

VERIFICATION/CERTIFICATION \$ _____ (5)

Assumes _____

COSTS (LINES 1+2+3+4+5) \$ _____ (6)

COST PLUS 35% GROSS MARGIN (LINE 6 / .65) \$ _____ (7)

PURCHASING LABOR ESTIMATE \$ _____ (8)

RECEIVING AND KITTING LABOR ESTIMATE \$ _____ (9)

ESTIMATE TOTAL (LINES 7+8+9) \$ _____ (10)

NOTE THAT THIS IS AN ESTIMATE ONLY.

Actual Invoices will track actual costs.

Sales Tax may be required.

May 11, 1993

**DOCTOR DESIGN INC.
CREDIT APPLICATION****BY:**_____
NAME OF COMPANY_____
ADDRESS_____
YEARS AT ADDRESS_____
CITY_____
STATE_____
ZIP_____
AREA CODE_____
PHONE

The following information must be provided. It will be held in the strictest confidence.

OWNERSHIP:☐ Corporation☐ Partnership☐ Check here if incorporated within the past 12 months☐ Individual

1. _____
NAME(S) OF PRINCIPALS(S) ADDRESS PHONE

2. _____

3. _____

FINANCE:_____
BANK_____
BANK ADDRESS_____
PHONE_____
ACCOUNT NUMBERS_____
BANK_____
BANK ADDRESS_____
PHONE_____
ACCOUNT NUMBERS

May 11, 1993

REFERENCES:

1. _____
BUSINESS NAME ADDRESS ZIP PHONE

ACCOUNT NUMBER
2. _____
BUSINESS NAME ADDRESS ZIP PHONE

ACCOUNT NUMBER
3. _____
BUSINESS NAME ADDRESS ZIP PHONE

ACCOUNT NUMBER
-

CONTACTS:☐ Purchase Order Required

PURCHASING CONTACT PHONE

ACCOUNTS PAYABLE CONTACT PHONE

If purchasing goods for resale, please provide reseller's certificate number:

ACCEPTANCE:

We certify that all the information on this form is correct. We fully understand your credit terms and agree to the proper payment in consideration of extended credit.

SIGNED DATE

NAME PRINT TITLE

May 11, 1993

APPENDIX R

INNOVAD
MUTUAL NON-DISCLOSURE AGREEMENT

THIS AGREEMENT, made 05/24/93, by and between INNOVAD, having an office at 33300 Mission Blvd. Ste. 131, Union City, CA 94587, and

HASHIMOTO CORPORATION having an office at 285 Sea Cliff, San Francisco, CA.

WHEREAS, the parties wish to discuss the possibility of a License Agreement between HASHIMOTO CORPORATION and INNOVAD; and

WHEREAS, in connection with such discussions the parties will exchange certain information specifically relating to the **Radio Frequency Auto Dialer** which is confidential, proprietary information of the disclosing party; and

WHEREAS, the parties wish to ensure that all such information is treated with special care to protect its confidential, proprietary nature.

NOW THEREFORE, in consideration of the mutual promises and covenants herein contained, the parties agree as follows:

1. Each party agrees that it will not disclose any confidential information of the other, as specified in this paragraph 1, subparagraphs A through D, to any person, or entity. If such information is in tangible form, it shall be returned to the disclosing party upon request.

A. All matters, information and plans, as well as the fact that discussions are taking place, and the identity of the parties involved, shall hereafter be held in confidence, treated as confidential information proprietary to the disclosing party and shall not be disclosed in whole or part to others, or reproduced or copied in whole or in part for any purpose, without the express written consent of the disclosing party.

B. Each party will regard and preserve as confidential all information related to the business of the other party. Each party shall not without first obtaining the written consent of the other, disclose to any person, firm or enterprise, or use for its benefit, any information relating to the pricing, methods, process, financial data, lists, apparatus, statistics, programs research, development or related information of the other party, concerning past, present or future business activities of the other party.

C. Information shall not be deemed "confidential" for purposes of this paragraph 1 to the extent, that such information (1) was acquired by a party hereto before the contemplated discussions and when such party was under no obligation to keep such information confidential, (2) is or becomes publicly known through no wrongful act of a party hereto, or (3) is received from a third person or entity who is legally entitled to possession of such information.

D. Each party further acknowledges and agrees that, in the event of a threatened breach or active breach by it of the provisions of the Agreement, the other party will have no adequate remedy for damages, and, accordingly, shall be entitled to an injunction against such threatened breach. However, no provision in this Agreement shall be construed as a waiver or prohibition of any other legal or equitable remedy for threatened or active breach hereof.

2. Neither party shall advertise, market or otherwise make known to others confidential information, as described in paragraph 1, learned from discussion, occurring pursuant to this Agreement, in a manner which attributes the information to or associates the information with the name of the other party, its parent, subsidiary, or affiliated corporations, without the prior written consent of the party.

3. Nothing contained in this Agreement shall be construed as granting or conferring upon a party hereto any proprietary right, by license or otherwise, in any confidential information disclosed by the other party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their authorized persons as of the date set forth below.

For INNOVAD:

By: 

Title: Owner-Innovad

Date: May 24, 1993

For HASHIMOTO CORPORATION

By: 

Title: _____

Date: May 24, 1993

APPENDIX S

Henderson

File

Date: Sat. May 29, 1993 1:27 PM

To: Mr. Kazuo Hashimoto

Destination Fax: 415-751-1840

From: Dan A. Henderson/INNOVAD

Subject: Meeting on Monday

Number of pages excluding cover page: 0.5

Number of delivery attempts: 2

U.S.P. 4882,750

U.S.P. 4821,308 (KH-802)

Newstom

celery } 15¢ / month
40¢ / month
2¢
24¢
2¢ / month

This facsimile message was electronically transmitted by MCI Mail®

Call 800-444-6245 (in the U.S.)

Dear Mr. Hashimoto:

Thank you for talking with me earlier this week regarding my project and the possibility of licensing your patents.

I consider it a real pleasure to meet you - our meeting has inspired me to even harder in my career as an inventor.

You will receive a formal letter from me by mail, but I did not want you to wait to receive my appreciation for your interest in me and my project.

I look forward to speaking with you again.

With much respect and admiration,

Daniel Henderson

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通
10/17

APPENDIX T

Innovad

Innovative Development & Manufacturing

June 17, 1993

Mr. Kazuo Hashimoto
Hashimoto Corporation
285 Sea Cliff
San Francisco, CA

Dear Mr. Hashimoto:

Thank you for helping me with the autodialling pocket bell invention that we discussed today. I will be meeting with investors at the end of this month. License rights to your patent will help me raise money more quickly for the prototype development.

Enclosed is a short letter of understanding for license rights to your US Patents 4,821,308 and 4,882,744 and US Patent 4,065,642 issued to McClure (attached for your reference).

My understanding is that you are willing to license me under these patents for one year, renewable on a year by year basis. You also mentioned that you would allow me exclusive license rights for the first 6 months of our agreement. I understand that we can discuss exclusive license rights beyond the first 6 months upon completion of a working prototype and satisfactory progress made by me.

I also understand that I am obligated to show you a working prototype as soon as it is completed.

I will call you in a few days to confirm that the attached letter of understanding is acceptable to you.

Also, I am studying the materials you loaned to me regarding the Irvine cellular phone company - I will return the materials to you with my recommendations by Tuesday of next week.

With Best Regards,



Dan Henderson
Inventor

Attachment - Letter of Understanding - License Agreement.

33300 Mission Boulevard, Suite 131, Union City CA 94587 (510) 487-6702

APPENDIX U

Innovad

Innovative Development & Manufacturing

Saturday, June 19, 1993

FACSIMILE TO (415) 751-1840

Mr. Kazuo Hashimoto
Hashimoto Corporation
285 Sea Cliff
San Francisco, CA

Mr. Gurkay

Dear Mr. Hashimoto:

I have completed studying the documents you lent to me. It appears that some of GlobalLink technology may be useful for my planned pager product. Mr. Tom Hashimoto and I will meet with them on June 22 at 1:30 to learn more about what they have.

I sent the GlobalLink documents to him by Federal Express on Friday June 18. You will receive another copy of the documents by US Mail next week.

Attached are patents that may be helpful to you regarding the GlobalLink Company. I searched up to 1992 databases and found two design patents assigned to Universal Cellular Inc.. I also searched for patents issued to James Wohl, Lawrence Gach, and Ted Naugler of Universal Cellular Inc. but did not find anything further.

I look forward to speaking with you after the meeting Tuesday to discuss GlobalLink and the License agreement you received from me last Friday.

With Best Regards,



Dan Henderson

Attachments (seven)

33300 Mission Blvd., Suite 131, Union City CA 94587 (510) 487-6702

United States Patent [19]
Freeland et al.

[11] Patent Number: **5,148,473**
 [45] Date of Patent: **Sep. 15, 1992**

[54] PAGER AND RADIOTELEPHONE APPARATUS

- [75] Inventors: **Joseph C. Freeland, Lindenhurst;**
David M. Hess, Elgin, both of Ill.
 [73] Assignee: **Motorola, Inc., Schaumburg, Ill.**
 [21] Appl. No.: **773,759**
 [22] Filed: **Oct. 15, 1991**

Related U.S. Application Data

- [63] Continuation of Ser. No. 575,473, Aug. 30, 1991, abandoned.
 [51] Int. Cl.: **H04M 11/00**
 [52] U.S. Cl.: **379/59; 379/58; 379/57**
 [58] Field of Search: **379/57, 58, 59, 61; 340/825.44**

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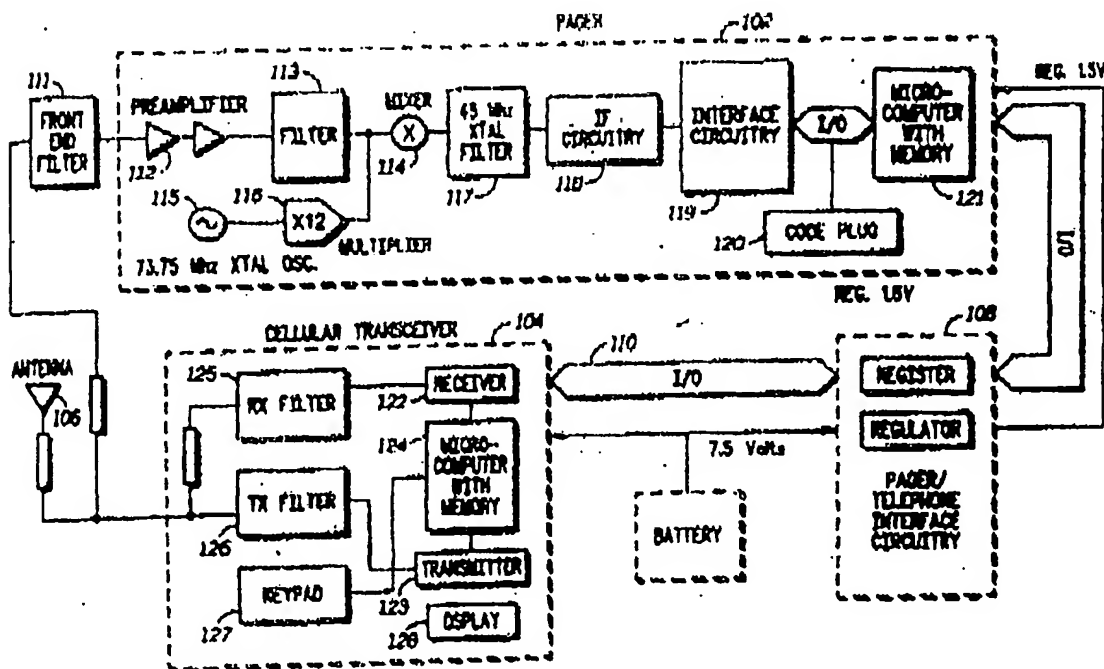
Financial Times article, "Designs on Pocketing the Cellular Market", by Geoffrey Charlsh, Dec. 11, 1987. Published German Application DE3329267, by Künzel, Feb. 1985 (379-58).

Primary Examiner—James L. Dwyer
 Assistant Examiner—Dwayne D. Bost
 Attorney, Agent, or Firm—Kenneth W. Bolvin

[57] ABSTRACT

The present invention encompasses a pager and radiotelephone apparatus (100) having a radio pager section (102) and a cellular radiotelephone section (104) into one unit. The apparatus (100) may automatically receive a plurality of pages while the cellular radiotelephone section (104) is on, communicating a cellular telephone call, or off and unattended. The received pages are stored in the pager section (102) until the apparatus user acknowledges their receipt by a key-stroke. The pages are then transferred to the radiotelephone section (104) and stored in non-volatile memory for later use.

5 Claims, 3 Drawing Sheets



stored in the non-volatile memory will remain for later recall. If the RCL pushbutton was activated, the scratchpad memory will be displayed but not called. Different location in the scratchpad memory can be recalled by activating the RCL pushbutton followed by a numeric pushbutton.

Once all the page data is moved out of the pager section (102), the PAGER ON/OFF line is pulsed high momentarily by the 68HC11 microcomputer (124) to toggle the D flip flop (301), thereby turning the pager section (102) off. This clears the pages stored in the pager section's microcomputer (121). The PAGER ON/OFF line is pulsed again to turn the pager section (102) back on.

One skilled in the art will know that various aspects of the present invention can be changed while still remaining within the scope of the invention. These changes may include the number of pages stored in the microcomputer stack, the number of telephone numbers stored in the radiotelephone section, and the time the radiotelephone section remains on. In summary, a combination radiotelephone/pager apparatus has been shown that permits operation in both radiotelephone and paging systems.

We claim:

1. A method for controlling a combination pager and radiotelephone apparatus, the combination pager and radiotelephone apparatus including pager means for receiving on a paging radio channel a plurality of radio paging signals each having a telephone number with at least one digit, and the combination pager and radiotelephone apparatus including cellular transceiver means being coupled to the pager means through an interface circuit and having at least a recall and send pushbutton for transmitting on radiotelephone channels radiotelephone call signals, the interface circuit having a register for storing the telephone numbers, the method comprising the steps of:

receiving and storing in the paging means a plurality of radio paging signals each having a telephone number with at least one digit;

producing an indication signal when each paging signal has been received in the paging means; moving the stored telephone numbers from the paging means into the register in response to a control signal;

counting in the cellular transceiver means, in response to the indication signal, the number of paging signals received;

generating the control signal in response to activation of the recall or send pushbutton;

moving the stored telephone numbers from the register to the cellular transceiver means; and

transmitting, in response to activation of the send pushbutton, radiotelephone call signals using the

last received read-out telephone number in the cellular transceiver means.

2. A pager and radiotelephone apparatus for communicating radiotelephone call signals on radiotelephone channels and receiving paging signals on a paging radio channel, the pager and radiotelephone apparatus comprising:

an antenna for receiving the paging signals and communicating the radiotelephone call signals;

pager means having first filter means coupled to the antenna for receiving paging signals on the paging radio channel and having memory means for storing the received paging signals, each paging signal having a telephone number with at least one digit, the pager means further providing an indication signal when each paging signal has been received, and the pager means being responsive to a first control signal for reading out the stored telephone numbers and being responsive to a second control signal for clearing the memory means;

cellular transceiver means coupled to the pager means, having at least a send pushbutton and a recall pushbutton, and having second filter means coupled to the antenna for receiving radiotelephone call signals on the cellular radio channels, the cellular transceiver means responsive to each indication signal for counting the number of paging signals received, and the cellular transceiver means responsive to activation of the recall pushbutton for generating the first control signal to enable the pager means to read out from the memory means the counted number of stored telephone numbers and thereafter generating the second control signal to enable the pager means to clear the memory means, and the cellular transceiver means responsive to activation of the send pushbutton for transmitting radiotelephone call signals using one of the read out telephone numbers;

a power source for generating a predetermined voltage to power the cellular transceiver means; and interface circuitry, connected to the pager means, the cellular transceiver means, and the power source, the interface circuitry having regulation means for regulating the predetermined voltage to a lower voltage to power the pager means, the interface circuitry additionally having a memory register for temporarily storing the telephone numbers read out from the memory means.

3. The apparatus of claim 2 wherein the antenna is coupled to the first filter means by a transmission line.

4. The apparatus of claim 2 wherein the antenna is coupled to the second filter means by a transmission line.

5. The apparatus of claim 2 wherein the second filter means includes a receive filter and a transmit filter, each filter being coupled to the antenna by a separate transmission line.

• • • • •

United States Patent (19)

Levanto et al.

(11) Patent Number: 5,175,758

(43) Date of Patent: Dec. 29, 1992

(34) CELLULAR TELEPHONE SYSTEM INTEGRATED WITH PAGING NETWORK

(75) Inventors: Lauri Levanto, Märynummi; Jukka T. Ranta, Salo, both of Finland

(73) Assignee: Nokia Mobile Phones Ltd., Salo, Finland

(21) Appl. No.: 579,814

(22) Filed: Sep. 4, 1990

(30) Foreign Application Priority Data

Sep. 15, 1989 [FI] Finland 894371

(31) Int. Cl.: H04M 11/00

(32) U.S. Cl.: 379/57; 379/59;
379/63

(58) Field of Search 379/57, 60, 61, 58,
379/63, 56, 59; 455/33, 56

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Article: Financial Times, "Designs on pocketing the cellular market", by Geoffrey Charlsh, Dec. 11, 1987.

Primary Examiner—Curtis Kuntz

Assistant Examiner—Dwayne D. Bost

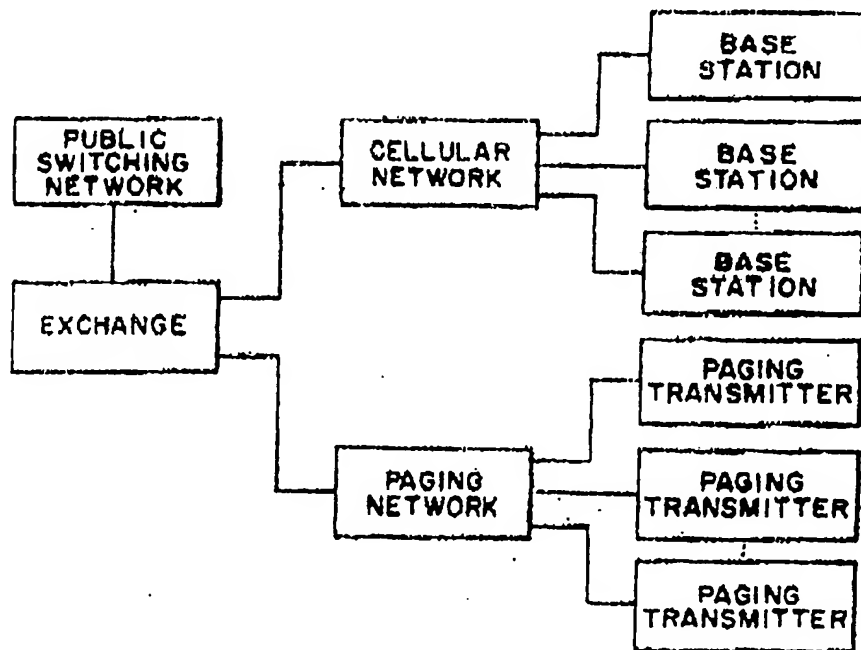
Attorney, Agent, or Firm—Darby & Darby

(57)

ABSTRACT

A telephone system with which a connection between two subscribers can be established, at least one of them being a mobile subscriber. The system includes a paging network composed of one or several extensive paging ranges, each of them having a paging transmitter (H1, H2) of its own, a small cellular network with an exchange and a plurality of base stations (T), and mobile telephones with which a pager has been integrated. When calling a mobile telephone, the transmitter of the paging range in which the telephone is known or assumed to be transmits a paging message to the telephone, whereby, when the telephone is in the neighborhood of the base station, the exchange of the cellular network establishes immediately a connection between the subscribers. No paging calls are lost because they are stored in the exchange of the cellular network, and on an appropriate occasion the pager of the telephone and the exchange compare the paging messages stored in the memories. The call can be transmitted from one base station to another during the call (handover).

19 Claims, 3 Drawing Sheets



5,175,758

7

neighbourhood outside said paging range. The base stations are positioned in factories. The operational radius of a base station is about 200 m, corresponding to the power used in the cordless system. In the present instance, there may be about 30 simultaneous external calls and about 30 internal calls. An external call occupies one channel, an internal call two channels. Thus, 80 channels are needed within the system, 30 whereof being in the most loaded base station. The closed system only has one paging range, because of which only the requests to call which remain in the exchange are put through.

The telephones are personal hand telephones with which a call can be made in all factory buildings. When moving between the buildings and outside in the city, the telephone receives pagers which can be discharged when back on the site.

Majority of the personnel live within the paging area so that call requests can be responded through a wire-connected network from home or the calls can be discharged when coming to the work place. If the telephone user lives outside the paging area, he has to read the arrived paging requests by registering the telephone.

An outgoing call can be made from one's own telephone on all sites.

The open system is characterized by an extremely extensive paging system, for instance national or multinational. The size of the paging range is such that only a fraction of the users move from one paging range to another every day.

The system offers paging services, an immediate speech contact within the base stations, and an automatic response call service. The level of services may vary from range to range as the paging range is more covering than that of the speech traffic. As concerns subscriber classes, a less expensive paging service and a speech service may also be distinguished. The system may be so constructed that the apparatus of the present CT2 system are completely utilisable if the specification of the speech channel is adapted to be the same. The paging services and the handling of the arriving call necessitates a device conforming to the new system.

The system may also be implemented in the form of a special city network in the manner of the CT system, requiring a dense base station coverage, but also in the form of an extremely economic countryside network of low service level.

The city network of the open network is a small cellular network in which a home base station need not be defined. The paging range is uniform, whereby no registration is needed. The paging operation may be so constructed that very few shadows are established therein, and that the coverage of the base station services may be selected to conform to the demand. The base station network may be a small cellular network, whereby the power range of the mobiles is of the order of 100 mW, or a cellular micro network, whereby the power range is of the order of a few milliwatts.

If the receipt ranges of the base stations are overlapped, it is possible, without interrupting the call, to move from one receipt range of the base station to another, hand over, elsewhere the system only warns of the switching off of the call.

A delayed response call (paging memory) improves the level of services even in a defective base station network.

8

In a city network, separate densely populated areas may be covered with the base stations within the range of a joint paging range.

The open system as a countryside network offers an economical alternative for implementing low service level. The entire area is typically covered with a paging network, the cities with a small or a micro cellular network, and in sparsely populated areas, the roads at intervals of e.g. 15 to 30 minute drives. The base stations are positioned in the marked parking sites because a mobile vehicle is able to travel over a receipt range during a call. The services of a countryside network consist primarily of requests to call and automatically reverse calls.

The open and the closed systems may also be combined. Private services employing a joint paging system may be included in an open system. Private base stations may be so defined in programs or using a private call channel that they show up in display only to the mobiles of the closed network. This kind of private service may be, for instance, an exchange of a company, whereby the enterprise buys a comprehensive paging service while attending itself to the telephone exchange within its own premises.

Operation through the open network may be allowed to the subscriber apparatus of the closed network outside the operating range of its own, but this may also be blocked.

The system and the procedure of the invention enables setting up a call between two mobile telephones so that an incoming call to a mobile telephone is possible and both mobile telephones can move from one receipt range of a base station to another during the establishing of the call, and during the call, so that the connection will not be switched off. Owing to the cellular system, one base station may serve several users. A significant characteristic feature is that even if the telephone were entirely switched off from use, or were located outside the paging range, the paging messages sent to it are stored in the exchange of the system, and no messages get lost.

It is obvious to a person skilled in the art to implement the system of the invention and the procedure for its use in a number of different ways, remaining, however, within the sphere of protection of the claims.

We claim:

1. A telephone system for establishing a connection between telephone devices of a first and a second user when a location of the telephone device of the second user is not known, comprising:

telephone devices of the first and second users, each of the telephone devices having a radio telephone with multiple channels and a pager for providing paging messages;

a paging network for transmitting paging messages between the telephone devices of said users, said paging network having at least two paging transmitters each establishing a respective paging range;

a cellular network for transmitting telephone calls between the telephone devices of said users, said cellular network having a plurality of base stations each with a receipt area for servicing the telephone devices located within range of the receipt area of said base stations, some of said base stations being located within at least one of said paging ranges;

and

at least one exchange associated with each of said base stations, said exchange being operative for

5,175,758

9

setting up calls within the cellular network and for storing in a first memory said transmitted paging messages. said exchange storing the transmitted paging message in a first memory in response to an inability of the telephone device of said second user to receive the transmitted paging message when sent by the pager of the telephone device of the first user and thereafter transferring the stored paging message to said telephone device of said second user at a time when said telephone device of said second user can receive said paging message. said exchange comprising means for initiating a call from said telephone device of said second user to said telephone device of said first user by using said stored paging message when said telephone device of said first user has been switched off before connection is established between the telephone device of the second user and the exchange.

2. The system in accordance with claim 1 wherein said telephone device for the one user is provided with a display, keyboard, second memory and control unit, jointly used by said pager and mobile telephone.

3. The system in accordance with claim 1 wherein said cellular network further comprises means for transferring said call from a first of said plurality of base station to a second of said plurality of base stations when said respective receipt range of said first and second base stations overlap and means for alerting said users when said call cannot be transferred between said first and second base stations.

4. The system in accordance with claim 1 wherein said cellular network further comprises means for updating said control of said exchange when the portable telephone moves between a first and second of said paging ranges so that transmitted paging messages are transmitted to said second paging range.

5. The system in accordance with claim 1 wherein the system is connected to a public switching network.

6. The system in accordance with claim 1 wherein said cellular network further comprising means for sending said stored paging message to set up the connection between said first and said second user, when the telephone device of said second user contacts said exchange of said respective one of said base stations.

7. The system in accordance with claim 6 wherein said contacting is performed when said second user is in said predetermined range of said respective base station.

8. The system in accordance with claim 1 wherein said base station includes a call channel and a speech channel.

9. The system in accordance with claim 1 wherein said exchange comprises means for transmitting a call set up message from said first user on said call channel to said base station of said second user, when said second user is outside the ranges of the base station of the first user.

10. The system in accordance with claim 1 further including means for informing said exchange when said cellular telephone moves between said paging ranges during said call.

11. The system in accordance with claim 1 further comprising means for storing messages in a second memory of said pager.

12. A method of operating a telephone system for establishing a connection between telephone devices of a first and a second user, comprising the steps of:

10

initiating a call from the telephone device of a first user to a telephone device of a second user when a location of the telephone device of the second user is not known, the telephone devices each having a radio telephone and a pager for providing paging messages;

transmitting said paging messages between said users via a paging network, said paging network having a plurality of paging ranges;

accessing a selected cellular network via a selected one of a plurality of base stations, each of said base stations servicing the users located within a predetermined range of said base stations;

controlling the set up of said initiated call with at least one exchange associated with each of said plurality of base stations;

controlling said paging network by receiving said paging messages at said exchange;

storing said paging messages in said exchange in a first memory if the telephone device of said second user cannot receive said transmitted paging message;

transferring said stored paging message to said second user when said second user can receive such transferred paging message; and

initiating a call by said exchange from said second user to said first user, by using said stored paging message, when said telephone device of said first user has been switched off before establishment of connection between said second user and said exchange.

13. The method in accordance with claim 12 further comprising the steps of:

transferring said call from a first of said plurality of base station to a second of said plurality of base stations when said respective predetermined range of said first and second base stations overlap.

alerting said users when said call cannot be transferred between said first and second base stations.

14. The method in accordance with claim 12 further comprising the step of updating said control of said exchange when the portable telephone moves between a first and second of said paging ranges so that transmitted paging messages are transmitted to said second paging range.

15. The method in accordance with claim 12 further comprising the step of transmitting said stored paging message to set up the connection between said first and said second user when said exchange is contacted by said second user through said respective one of said base stations.

16. The method in accordance with claim 15 wherein said exchange is contacted when said second user is in said predetermined range of said respective base station.

17. The method in accordance with claim 12 further comprising the step of transmitting a call set up message from said first user on a call channel to said base station of said second user, when said second user is outside the system.

18. The method in accordance with claim 12 further comprising the step of informing said exchange when said cellular telephone moves between said paging ranges during said call.

19. The method in accordance with claim 12 further comprising the step of storing paging messages in a second memory of said pager.



US00D327059S

United States Patent (19)

Chu et al.

(11) Patent Number: Des. 327,059

(45) Date of Patent: Jun. 16, 1992

[34] CELLULAR TELEPHONE

[75] Inventors: Robb Chu, San Francisco; James P. Wohl, Beverly Hills, both of Calif.

[73] Assignee: Universal Cellular, Inc., Anaheim, Calif.

[**] Term: 14 Years

[21] Appl. No.: 613,369

[22] Filed: Nov. 15, 1990

[52] U.S. Cl. D14/138; D14/147;
D14/148; D14/248[58] Field of Search D14/138, 151, 147, 248;
D18/11; 379/433, 440, 428

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D. 309,628	7/1990	Sawada et al.	D18/11

Primary Examiner—Horace B. Fay, Jr.
 Attorney, Agent, or Firm—Flehr, Hohbach, Test,
 Albritton & Herbert

[57] CLAIM

The ornamental design for a cellular telephone, as shown and described.

DESCRIPTION

FIG. 1 is a front, top and right side perspective view of a cellular telephone showing our new design with its slide panel in extended position;

FIG. 2 is a front, top and right side perspective view thereof with the slide in a contracted position;

FIG. 3 is a top plan view thereof with its slide in extended position;

FIG. 4 is a right side elevational view thereof with its slide in extended position, taken on the lines 5—5;

FIG. 5 is a rear end elevational view thereof, taken on the line 5—5 of FIG. 4;

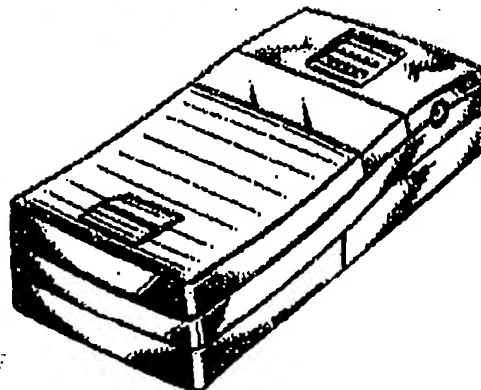
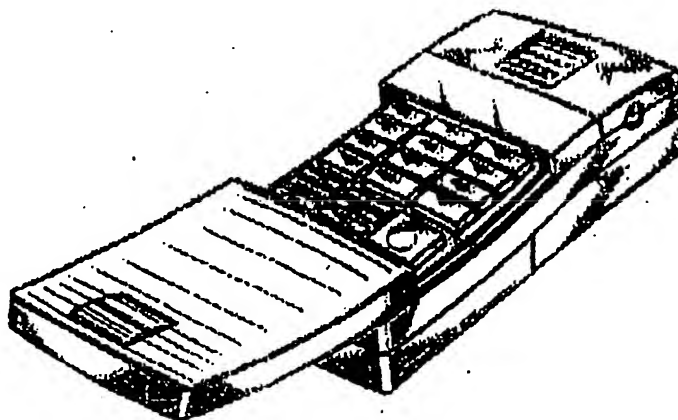
FIG. 6 is a left side elevational view thereof;

FIG. 7 is a front end elevational view thereof, taken along the line 7—7 of FIG. 6;

FIG. 8 is a top plan view thereof with its slide in contracted position;

FIG. 9 is a left side elevational view thereof with its slide in contracted position; and,

FIG. 10 is a bottom plan view thereof with its slide in contracted position.



United States Patent [19]

Atkins

[11] Patent Number: Des. 319,053

[45] Date of Patent: Aug. 13, 1991

[54] CELLULAR TELEPHONE

[75] Inventor: Warren Atkins, Anaheim, Calif.

[73] Assignee: Universal Cellular, Inc., Anaheim, Calif.

[**] Term: 14 Years

[21] Appl. No.: 492,110

[22] Filed: Mar. 12, 1990

[52] U.S. Cl. D14/138; D14/147

[58] Field of Search D14/138, 147, 148;
379/58, 59, 60

[56] References Cited

U.S. PATENT DOCUMENTS

D. 275,950 10/1984 Marshall D14/147
D. 284,468 7/1986 Matras D14/147
D. 285,439 9/1986 Nagels D14/138 X
D. 300,827 4/1989 Soren et al. D14/148 X

D. 305,717 1/1990 Soren et al. D14/138 X
D. 306,298 2/1990 Sawada D14/148
D. 309,301 7/1990 Soren et al. D14/148
D. 311,916 11/1990 Tomimatsu et al. D14/148

Primary Examiner—Horace B. Fay, Jr.

Attorney, Agent, or Firm—Timothy T. Tyson

[57] CLAIM

The ornamental design for a cellular telephone, as shown and described.

DESCRIPTION

FIG. 1 is a top plan view of a cellular telephone showing my new design;

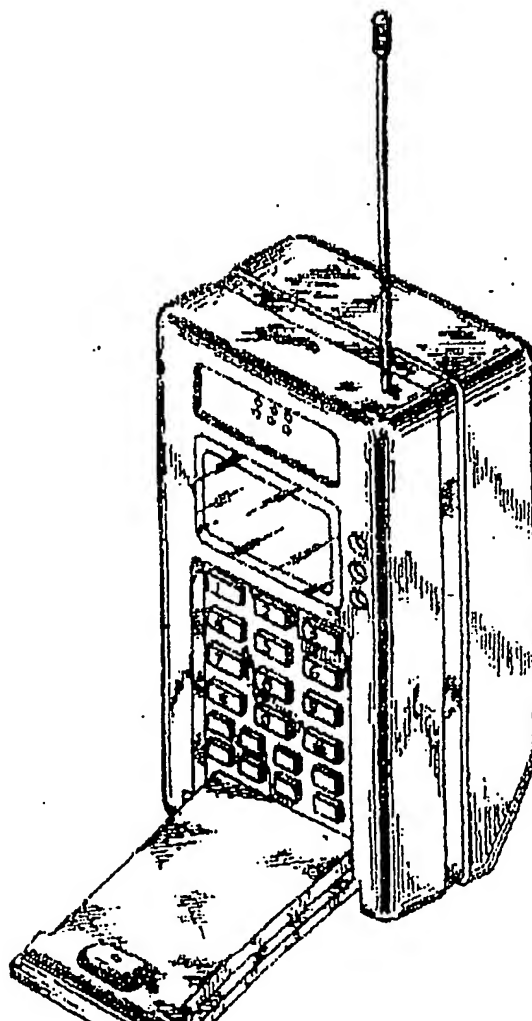
FIG. 2 is a rear elevational view thereof;

FIG. 3 is a front elevational view thereof;

FIG. 4 is a right side elevational view thereof; the left side elevational view being the mirror image thereof;

FIG. 5 is a bottom plan view thereof; and

FIG. 6 is a top, right, front perspective view thereof, with the door open and the antenna extended.





US005117449A

United States Patent [19]

Metroka et al.

(11) Patent Number: **5,117,449**
(45) Date of Patent: **May 26, 1992**

(54) DUAL RECEIVER APPARATUS FOR INTEGRATED PAGING AND RADIOTELEPHONE FUNCTIONS

(73) Inventors: Michael P. Metroka, Algonquin; Stephen V. Cahill, Palatine, both of Ill.
(73) Assignee: Motorola, Inc., Schaumburg, Ill.
(21) Appl. No.: 681,658
(22) Filed: Apr. 8, 1991

Related U.S. Application Data

(63) Continuation of Ser. No. 431,518, Nov. 3, 1989, abandoned.
(51) Int. Cl. H04M 11/00; G08B 5/22
(52) U.S. Cl. 379/58; 379/56; 379/57; 379/61; 379/63; 340/823.44
(58) Field of Search 379/54-57, 379/58; 340/823.44

References Cited

U.S. PATENT DOCUMENTS

3,564,150	2/1971	Muller	379/58
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4,573,582	3/1986	Makino	379/58
4,644,351	2/1987	Zaborsky et al.	340/823.44
4,661,972	4/1987	Kel	379/57
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4,747,122	5/1988	Bhagat et al.	379/57
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0212761 4/1987 European Pat. Off.

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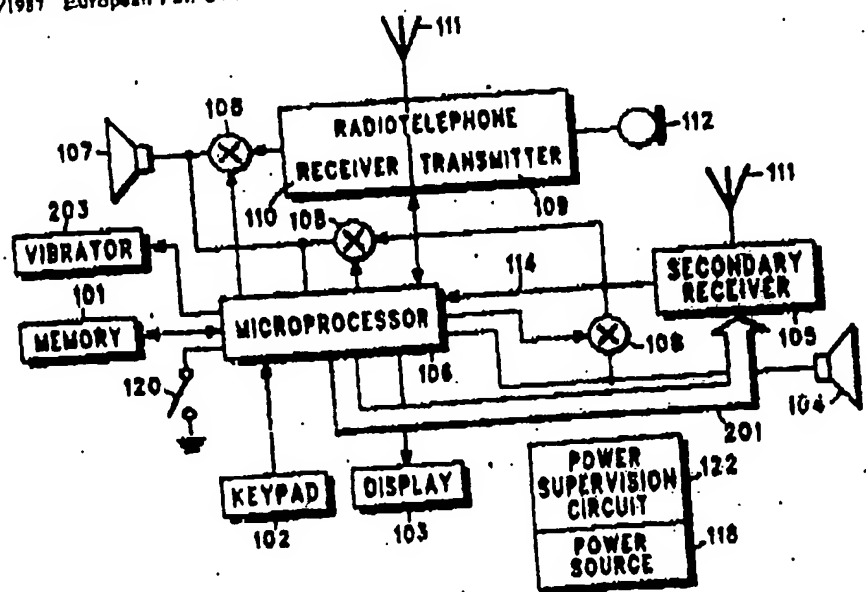
Charliah, Geoffrey, "Designs on Pocketing the Cellular Market", Financial Times, Dec. 11, 1987.
Toshiba, Abstract of European Patent #0,263,666, Apr. 1988, Derwent Publications LTD.
Motorola, "Pageboy Tone Radio Pager", Oct. 20, 1989.
Motorola, "Dyna TAC Cellular Mobile Telephone General Description", Jun. 15, 1983, Motorola, Dyna TAC 6000X, 1984.

Primary Examiner—Thomas W. Brown
Assistant Examiner—William Cumming
Attorney, Agent, or Firm—Kenneth W. Bolvin

ABSTRACT

Both paging and cellular radiotelephone functions can be combined in a small, lightweight, single device by sharing most circuitry. The apparatus can receive paging signals simultaneously with radiotelephone signals because of dual receivers (108 and 110). When the paged party receives a page, an alert tone, a vibration, a visual indication, or a voice message is used to alert the party. Information extracted from the paging signal can be stored in memory (101) for later use. The paged party can select among messages stored in memory. If a message contains a telephone number, the paged party can call that number using the radiotelephone function at the touch of a button. The apparatus's keypad (102) can be used to program the paging function receiving frequency, identification code and type of paging system.

4 Claims, 5 Drawing Sheets



United States Patent (19)

Sogaard Rasmussen

US005134717A

(11) Patent Number: **5,134,717**
(45) Date of Patent: **Jul. 28, 1992**

(54) RADIO TELEPHONE WITH REPERTORY DIALER

(75) Inventor: Poul E. Sogaard Rasmussen,
Glostrup, Denmark
(73) Assignee: Motorola, Inc., Schaumburg, Ill.
(21) Appl. No.: 668,373
(22) Filed: Mar. 11, 1991

Related U.S. Application Data

(63) Continuation of Ser. No. 439,737, Nov. 21, 1989, abandoned.

(30) Foreign Application Priority Data

Nov. 26, 1989 (GB) United Kingdom 8827670
Nov. 26, 1988 (GB) United Kingdom 8827733

(51) Int. Cl. H04B 1/38; H04M 1/276
(52) U.S. Cl. 455/89; 455/186.1; 379/354
(58) Field of Search 379/355, 357, 354, 216, 379/144, 91; 455/89, 90, 185, 186, 344

(56) References Cited

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4,680,787 7/1987 Marry 379/63
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4,903,322 2/1990 Inahara et al. 455/34
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2252690 1/1988 European Pat. Off.
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60-233967 11/1985 Japan
61-93765 5/1986 Japan
2192115 12/1987 United Kingdom

Primary Examiner—Reinhard J. Elsenzopf

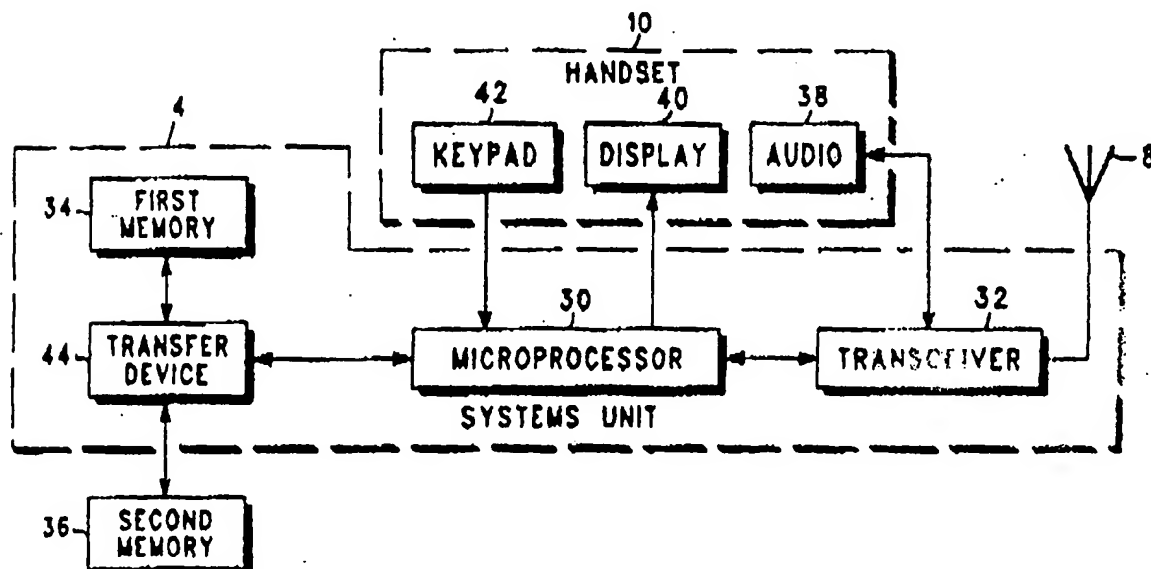
Assistant Examiner—Lisa D. Charouel

Attorney, Agent, or Firm—Kenneth W. Bolvin

(57) ABSTRACT

A radio (2) having: a first memory (34) for storing first information items; memory receiving slot (18) for temporarily receiving a second memory (20, 36) for storing second items of information; microprocessor (30) for accessing both said first and second memories; and user selective transfer device (42, 44) for causing an information item from one of the memories to be transferred to the other of the memories. In a preferred form the radio is a radiotelephone, the first and second items of information are telephone numbers and the second memory is a magnetic card or a smart card.

34 Claims, 2 Drawing Sheets



APPENDIX V

NON-DISCLOSURE AGREEMENT

This Agreement entered into this 22 day of JUNE 1993, by and between GlobalLink Communications, Inc., with a principal office in Irvine, California ("GlobalLink") and Lunov d - Dan Holera located in 33300 Mission Blvd #131
Van Nuys CA 91407

- A. Each party, as "Receiving Party", wishes to obtain from the other party as "Disclosing Party" certain information considered proprietary by Disclosing Party (the "Information").
- B. Disclosing Party is willing to make available the Information on a confidential basis upon receipt of certain assurances from Receiving Party.
- C. Receiving Party wishes to enter into this Agreement as an inducement for Disclosing Party to make available the Information.

NOW THEREFORE, in consideration of the mutual covenants hereinafter contained, Disclosing Party and Receiving Party agree as follows:

- 1. Receiving Party agrees to hold in confidence any and all Information that has been or will be disclosed, directly or indirectly, to Receiving Party except:
 - (a) Information which at the time of disclosure is in the public domain;
 - (b) Information which after disclosure is published or otherwise becomes a part of the public domain through no fault of Receiving Party (only after, and only to the extent that, it is published or otherwise becomes part of the public domain);
 - (c) Information which Receiving Party can show was in its possession (as evidenced by Receiving Party's written records) at the time of disclosure and was not acquired, directly or indirectly, from Disclosing Party or from a third party under a continuing obligation of confidence; and
 - (d) Information which Receiving Party can show was received by it (as evidenced by Receiving Party's written records) after the time of disclosure hereunder from a third party who did not acquire it, directly or indirectly, from a Disclosing Party under a continuing obligation of confidence.

For the purpose of this Paragraph 1, disclosures made to Receiving Party which are specific, (e.g., as to engineering and design practices and techniques, equipment, products, operating conditions, sales information, etc.) shall not be deemed to be within the foregoing exceptions merely because they are embraced by general disclosures in the public domain or in the possession of the Receiving Party. In addition, any combination of features shall not be deemed within the foregoing

exceptions merely because individual features are in the public domain or in the possession of Receiving Party, but only if the combination itself and its principal of operation are in the public domain or in the possession of Receiving Party.

2. Receiving Party agrees that it will not, without the written permission of Disclosing Party, use the information held in confidence by Receiving Party under Paragraph 1 hereof for any purpose other than as described in Recital "A" of this Agreement.
3. Receiving Party will disclose the Information provided hereunder solely to its employees necessary to carry out the purposes set forth in Recital "A", and who are familiar with the terms and conditions of this Agreement.
4. Upon completion of the purposes for which Information hereunder is provided, Receiving Party agrees to immediately return all documents and copies thereof, and notes made from the documents provided, to Disclosing Party.
5. Disclosing Party and Receiving Party agree that there is created herein a confidential relationship, and the covenants and agreements herein contained will be binding upon and inure to the benefit of their successors and/or assigns and their employees and agents.
6. Nothing contained in this Agreement or by operation of law shall be construed as:
 - (a) granting or conferring any rights, by license or otherwise, either expressly or by implication, estoppel or any other manner, to or for inventions or patent rights or copyrights by virtue of this Agreement; or
 - (b) granting or conferring any license or right with respect to any trademark, trade or brand name, the corporate name of either party hereto, or the corporate name of a subsidiary of either party hereto, or any other name or mark or any contraction, abbreviation or simulation thereof.
7. This Agreement shall expire three (3) years from the date of the last item of Information to be provided hereunder.
8. This Agreement shall be governed by the laws of the State of California.

GlobalLink Communications, Inc.

By: John E. Sherwood

Title: UP-SALES

Date: 6/22/93

Place: IRVINE CA.

By: [Signature]

Title: President

Date: 6/22/93

Place: Irvine CA

APPENDIX W

This agreement is by and between Kazuo Hashimoto of Hashimoto Corporation, a Japanese Corporation, doing business at 285 Sea Cliff, San Francisco, CA and Daniel Henderson / Innovad Company, doing business at 33300 Mission Blvd. Suite 131, Union City, CA 94587.

1. Hashimoto Corporation, or Kazuo Hashimoto, is the sole owner of all right, title, and interest to United States Patent Numbers 4,821,308 entitled Telephone Answering System with Paging Function and 4,882,744 entitled Automatic Paging System;

2. Hashimoto Corporation, or Kazuo Hashimoto, is the owner of one-half interest in, and has the right to convey exclusive rights to, United States Patent Number 4,065,642 entitled Message Signaling and Alerting System and Method Thereof issued to McClure;

3. Daniel Henderson and Kazuo Hashimoto have signed a mutual non-disclosure agreement on May 24, 1993 (Exhibit "A") and have had discussions related to a new invention called a Radio Frequency Auto Dialer or Auto Dialing Pocket Bell Device, also known as "Intellect" or "Intellipager".

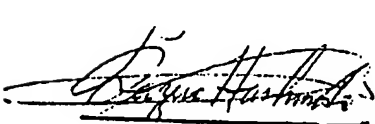

4. Kazuo Hashimoto / Hashimoto Corporation agrees to grant Daniel Henderson / Innovad or any related company, a transferable license right under the US Patents 4,065,642, 4,882,744, and 4,821,308 to make, use, and sell pager or pocket bell devices throughout the United States for an initial term of one year from the date of execution of this agreement. This agreement will be renewable at the end of each one year period upon mutual agreement between Kazuo Hashimoto or Hashimoto Corporation and Daniel Henderson or Innovad or any related company.

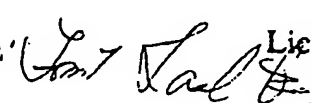
The first six months of the license grant will be on an exclusive basis for all Pocket Bell or Pager devices. At the end of the initial six months, Kazuo Hashimoto agrees to extend the exclusivity for additional periods based upon satisfactory performance by Daniel Henderson, Innovad or any related company.

Further, Daniel Henderson agrees to submit to Kazuo Hashimoto a report of progress on the development of a prototype unit upon request. Daniel Henderson also agrees to show Kazuo Hashimoto the completed prototype pager / pocket bell dialer as soon as it is completed and prior to disclosure to other parties.

5. In consideration for this license agreement, Daniel Henderson / Innovad or any related company agree to pay to Kazuo Hashimoto, or Hashimoto Corporation, or his foundation royalty payments of 1% (one percent) of all U.S. pager or pocket bell gross sales revenues (X factory). Payment will be made within 60 days after the end of each six month period so long as this license agreement is in effect.

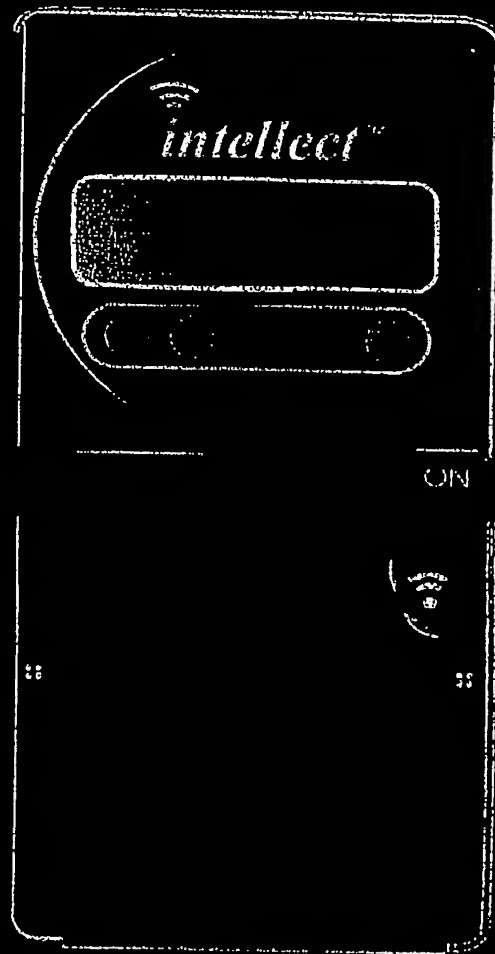
6. This Agreement constitutes the entire agreement and understanding between Kazuo Hashimoto and Daniel Henderson. No modification shall be valid unless in writing and signed by both parties. This agreement does not create an agency, Joint Venture, or Partnership between Kazuo Hashimoto and Daniel Henderson. Witnessed this day,

	president	06/24/93		Owner	06/17/93
Kazuo Hashimoto	Title	Date	Daniel Henderson	Title	Date

Witness:  License Agreement Page 1 of 1

APPENDIX X

intellect Corporation



U.S. Pat. 4,490,579 4,821,308 4,065,642
4,882,744 4,961,216 4,882,750
4,924,496

Other Patents Pending

CARD/ANS.



- Eight memory locations

DIAL



- Dials highlighted field in File display or Page display modes.
- Allows dial mode from keypad.
- Dials "local" by suppressing area code
- Dials "slow" for difficult line conditions.

CALC



- Standard four function arithmetic

FILE



- Personal file
- Business file

TO-DO



- Date / Time search able
- Alarm codes can be appended to file

TIME



- Local time
- World time
- Daily alarm - on/off
- Set / change local time

PAGE



- Time / date stamp
- Auto file match with PC download data
- Fax, phone, E-mail signals
- stored in buffer memory for later retrieval

CURSOR MOVEMENT



- Hold down for rapid cursor movement
- Used with Search mode

CALENDAR



- Hot link to TO-DO activities
- Context sensitive

SEARCH



- Used in conjunction with FILE, TO-DO, TIME, PAGE, and CALENDAR mode keys.

SECRET



- Mark records to restrict access.
- Enter number, enable / disable.

RECORD



- Allows voice notations for items such as customer requests for information, reminders, and other important information.
- Digital memory stores up to 2 minutes - no moving parts.
- Also provides for a voice response to Incoming Fax, Page, E-Mail, etc..

COMPUTER



- Provides menu driven instructions for computer link to download data or upload data from MAC/PC.

APPENDIX Y

Innovad

Innovative Development & Manufacturing

FACSIMILE to 415-813-3097
Phone 415-857-2805 Scty. Carol Frisini
August 05, 1993

Hewlett Packard Corporation
Attn: Mr. Ron Griffin

Dear Mr. Griffin:

As we discussed, I am involved in a new product development effort which is related to a portable hand-held device.

I currently own or hold exclusive license rights to the following US patents:

4,085,642	Message Signaling and Alerting System and Method	McClure
4,821,308	Telephone Answering System With Paging Function	Hashimoto
4,882,744	Automatic Paging System	Hashimoto
4,490,679	Auto Dialing Paging Receiver	Godoshian
4,582,760	Programmable Dialer System	Henderson

I am also concluding negotiations on several other patents related to our current project.

There are three technologies that we are interested in which are held by Hewlett Packard.

First, an article in the latest issue of Microtimes (July 26, 1993) describes the Serial Infrared Link (SIR) and PCMCIA technologies which are available for license. We would like to embody these technologies in our planned device. No patent numbers were cited in the news article/interview.

Secondly, we would like to discuss possible licensing of US 5,043,721 issued to May (Corvallis, OR) entitled *Paging Accessory for portable information/computing devices*.

I would like your assistance in directing my inquiry to the decision maker(s) at Hewlett Packard who would be prepared to discuss possible licensing, cross licensing or some joint venture regarding these technologies that may prove to be mutually beneficial.

Thank you very much for your assistance in directing my inquiry.

With Best Regards,



Dan Henderson

(510) 487-6702

Response: - May Patent will be avail. for
license, a lot of interest from many Cos.
- will call when they determine
licensing policy.
Also, SIR technology \$5000 flat fee.

APPENDIX Z

ALPHA PAGE

THE PC TO PAGER MESSAGING SOFTWARE

LET YOUR PC PAGE YOU

MORNING APPT. SCHEDULED AT 10:00AM

JOHN REPORTS SYSTEM RUNNING FINE... PICKUP JOEY AT DAYCARE CENTER

TAKE FLIGHT 101 TO

LET YOUR PC PAGE YOU

InfoRad

InfoRad

INFORMATION RADIO TECHNOLOGY, INC.
635 East 185th Street • Cleveland, Ohio 44119
A Fitzgerald Telecom Company

216.531.1313
Fax 531.8383
800.228.8998

Circle 56 on Reader Service Card

enables you to connect your PC to a modem to send messages

to an alphanumeric paging receiver

AlphaPage offers you maximum flexibility

whether you need to message family members,

a sales force, medical

emergency teams, or a

tech support group

located around the world!

Discover more...

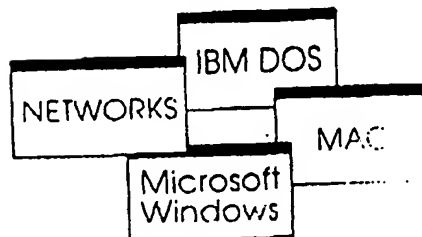
For further AlphaPage

messaging product

information call

800-228-8998

Available for:



APPENDIX AA

Library of Ideas

Patent records there date back to days of George Washington

By DALE F. MEAD

The garage-based business symbolizes the entrepreneurial spirit of Silicon Valley, but the patent library is closer to reality. Many new enterprises have started with someone poring over patents then have started on the other side of a garage door in a sun-bleached car.

And now inventors in the Bay Area have a patent library closer than the nearest university.

In fact, Sunnyvale's Patent Information Clearing House, as it's formally called, is the only one in the state. Sacramento, and people some drive here from the Capitol, use library does not have copies of every patent issued by the U.S. Patent Office. The Sunnyvale facility does—and the latest trademarks, too.

Sacramento? That's nothing without the Rocky Mountains? We get professionals, larger corporations and small entrepreneurs," supervising librarian George Glushenok explains. "We had people from Redding, Lun Olispu and Ukiah. Patent attorneys come here. I had one in Boulder, Colorado. I mentioned to him that Denver had a patent library. He said it wasn't as big as ours."

Just away in a residential neighborhood, the library stands in rectory Building 7 of the Raynor Activity Center, south of Dunford between Partridge and Quail roads. It doesn't even have a sign on it, only lettering on the door that reads "LIBRARY JRS Monday to Friday 9 a.m. to 5 p.m.; Sat 12 p.m. to 5 p.m." A sign hanging from the canopy reads "Entrance."

The four-room, single-story building contains copies of 1.5 million patents on paper as well as 300 film copies of patents all the way back to Patent No. 1, signed by George Washington in 1790, for an improved method of making ink. Patents from No. 4,937,368 to last month's issues can be read easily on two computerized computer disks (CD-ROM), updated weekly. Demand for the computers necessitates reservations and a time limit of 15 minutes when others are waiting, usually are.

"We were lucky to get three people a day when we got this thing started up," said recently retired attorney Jack L. Bohan of Los Altos, who launched the library in 1962 at age 29. "I went in there a week ago," says Bohan, now 61. "I was amazed. There were 30 people."

Orchard-laden Santa Clara Valley used to tout itself as the "Valley of the Heart's Delight." But Bohan took one look at the burgeoning high-tech institutions—Westinghouse, General Electric, IBM, the Ames Research Center and Stanford University's high-impact engineering programs—and knew what they would need.

"It seemed to be a good idea to have these patents for the people in these professions to look at," he recalls. "The three millionth patent was scheduled to be issued in September 1961. I thought that would be a good point for a library to start."

The challenge wasn't money—a subscription for copies of all patents issued cost \$50 per year—but finding a library that could handle the foot-tall stacks of paper published every week.

"I checked several other libraries," Bohan says. "San Jose had no room for their existing facilities; San Francisco likewise. Sunnyvale wasn't loaded with space, but they were intrigued with the idea. After six months, the City Council agreed to spring for the \$50." Patent files started arriving at City Hall in January 1962. Two years later, "one wall of my garage was stacked up with these things," he says.

When organizers found a temporary facility on Arques Avenue across from the current Bank of America branch, Sunnyvale's Boy Scout troop helped organize the files over two weekends so that they would be easier to search.

The response inspired the city to provide a permanent home in an abandoned firehouse on Fair Oaks Avenue in 1965. The patent library became part of the city's main library in March 1971, four months before the firehouse burned down. Nearly 10 years later, the patent library moved to its current location.

The Patent Information Clearing House also subscribes to government records for trademark search-



Librarian Dottie Thompson advises Larry McQuillan on his research.

es. A few years ago, the personnel conducted searches for a modest fee, but according to Glushenok, they now provide assistance because the computer system makes the task much simpler.

The library often serves clients it never sees. "Many companies set up accounts with us," Glushenok explains. "We charge fees and send copies to their offices."

Large corporations don't have to use the library for their searches. They can subscribe to on-line services more sophisticated than the facility can offer. But those services charge a hefty sum to print out files on-line. Many companies order copies from the clearing house instead. Even at \$3.55 per patent and 90 cents a page, plus any special charges, the client comes out ahead.

"We had one company ask for 50 patents," librarian Dottie Hamilton says. "We sent them the next day, and the company got them the following day by noon. Sometimes a

goal to test the originality of that secret."

Don Henderson of Union City, an ex-IBM employee, already has one product out through his company—Innovat: Kid-A-Gen, a credit card-sized, preprogrammed telephone dialer for a key chain or wallet. Put it to a phone receiver and press the button, and it phones home. Henderson, inspired by renowned Japanese inventor Kazuo Hashimoto, who devised the first telephone answering machine in 1938, is now researching several other ideas.

"This is a great asset to have here," says Henderson, who uses the library frequently.

First-timer Larry McQuillan of Sunnyvale echoes the same sentiment. "We're pretty lucky to have this so close by," he says.

An economist, McQuillan wants to verify that the trademark for his pending newsletter isn't already taken. "I'm trying to figure all this out," he comments. "I'll know in a half-hour; that's when I get on the computer."

Joanne Schirle of Morgan Hill also spends her time perusing the trademark files, cleaning a fictitious name for her small business, through which she intends to market a product to help students study for their Graduate Record Examinations.

She's found another pay-off for her research. "I'm writing down names of companies that I might market my product to. If I decide to sell [the rights to] it in a couple years, there are all sorts of companies [with similar products] that might want to make it part of their product line," Schirle says.

Another frequent user, Fred O'Leary of Cupertino, sees the facility as a historical gold mine for his hobby, collecting corkscrews. Initially, he wanted to track down the patents for those in his collection; now he intends to track down every corkscrew ever patented. Corkscrews had many other uses besides opening wine bottles at the turn of the century.

"I suspect there are a thousand corkscrew patents," says O'Leary, who spends 1-6 hours a day at the library, going for the magic number. "I'm in the high nine hundreds now. I just go through the books."

company will need a patent by two-hour fax because they're going to court." The staff makes sure that the clients get it.

That level of service has made the library a moneymaker for the city. Last year, it brought in revenues of \$280,000 with expenditures of \$237,000, putting \$43,000 in Sunnyvale's General Fund.

In addition to offering efficiency and fiscal self-sufficiency, the patent library also exudes a spare intellectual charm borne of equality and mystery. The shelf-lined rooms lure a steady stream of strangers, each playing a private game of chess that can take minutes to lose or years to win. The person that one passes in the stacks or that waits for a turn to use the computer could be a harebrained Walter Mitty with a vague idea, an unsung genius living off inventor's royalties or anything in between. You can't tell by looking. All visitors have in common is a secret and a

APPENDIX BB

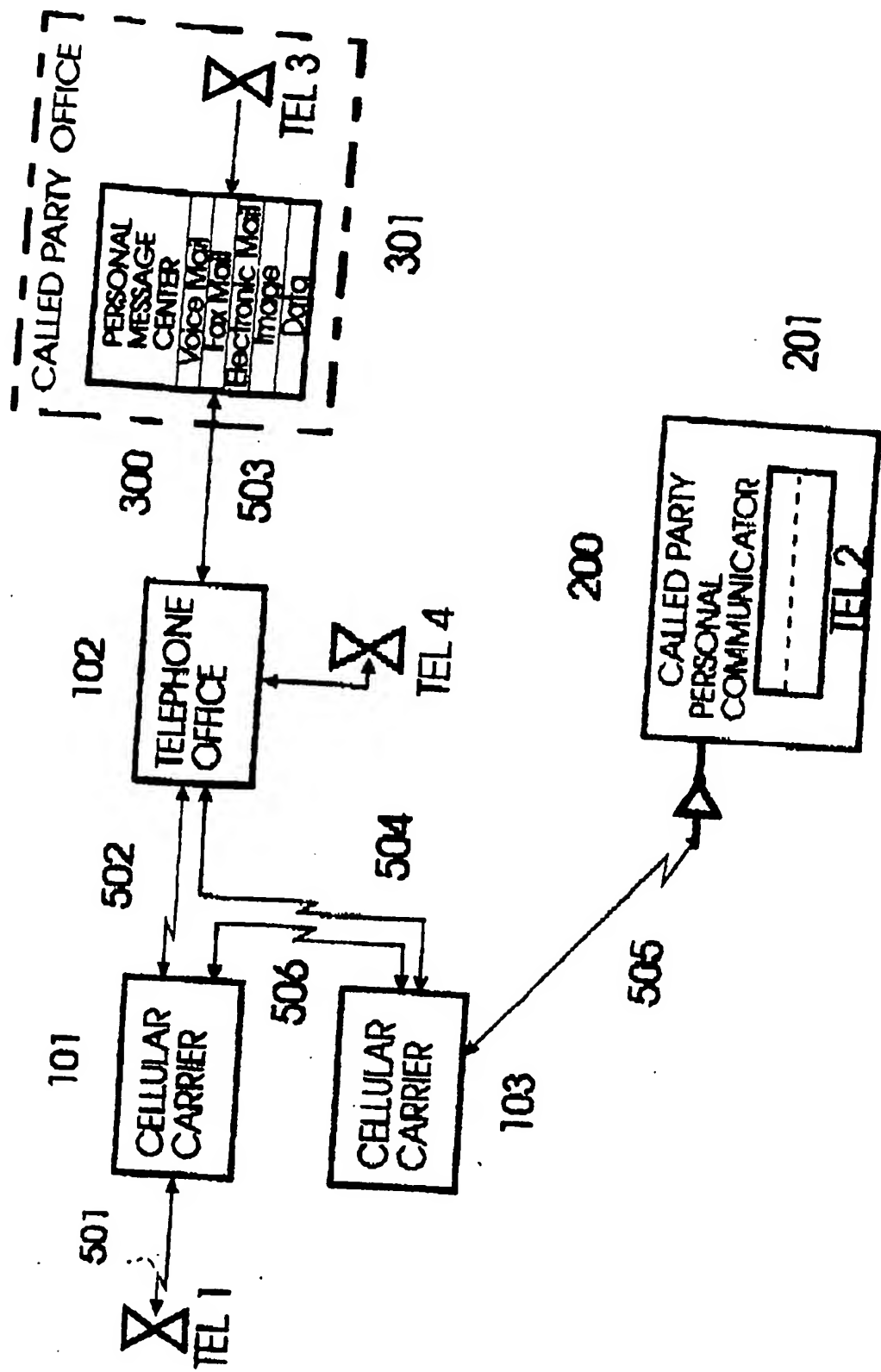


FIG. 4

File created 8/30/9.

APPENDIX CC

Innovad

Innovative Development & Manufacturing

September 22, 1993

Ms. Yoshimi Tomizawa-Shu
NEC America Inc.
8 Old Sod Farm Road
Melville, New York 11747

Re: Letter dated April 23, 1993 and our desire to pursue business opportunities with NEC.

Dear Ms. Tomizawa-Shu:

Per our telephone conversation yesterday, enclosed please find a mutual non-disclosure agreement for your review. In order for our foreign patent rights to be preserved related to our pending US applications it is necessary to execute a non-disclosure similar to the attached agreement. Please make suggestions as to any language that you find difficult to agree to and I will be happy to discuss.

I am interested in pursuing business opportunities with NEC which may include licensing, manufacturing, a joint venture or some other strategic partnering arrangement. I would like to meet with key decision makers at your company to explore mutually beneficial opportunities related to our current patent base and planned new products and pending patent applications.

As we discussed, I am travelling to Japan in mid October to present new product ideas and pursue business opportunities with several major Japanese companies.

Please call me at your convenience so that we may discuss how to meet our mutual objectives and proceed.

With Best Regards,



Dan Henderson
Innovad

Attachment

Innovad / NEC

MUTUAL NON-DISCLOSURE AGREEMENT

THIS AGREEMENT, made (DATE), by and between Dan Henderson dba Innovad (hereinafter called "Innovad"), having an office at 33300 Mission Blvd. Ste. 131, Union City, CA 94587, and NEC America Inc., having an office at 8 Old Sod Farm Road, Melville New York 11747-3112 (hereinafter called "NEC");

Innovad owns exclusive rights or owns US Patents 4,065,642, 4,821,308, 4,490,579, 4,882,744 and 4,882,750 which pertain to pager receiver devices, hereafter referred to as "PATENTED INFORMATION";

Innovad has developed certain new technologies and methods embodied in three new patent applications entitled:

- Personal communicator device with improved message notification, caller identification and caller location methods;**
- Improved message notification system and method; and**
- Improved personal messaging system.**

Innovad also has developed a prototype of a new pager receiver device which demonstrates the new technologies and methods, hereinafter referred to as "CONFIDENTIAL INFORMATION";

NEC is a developer and owner of certain technologies relating to the consumer electronics industry. NEC possesses certain confidential and proprietary information and know how in consumer electronic equipment hardware and software and the marketing thereof, hereinafter referred to as "CONFIDENTIAL INFORMATION";

The parties desire to investigate a possible business relationship in regards to research, development, and commercial exploitation of the Confidential and Patented Information.

Innovad and NEC wish to ensure that all confidential information remain confidential and be used only in the evaluation of a possible business relationship between the parties.

In consideration of the mutual promises and covenants herein contained, the parties agree as follows:

- 1. Each party agrees that it will not disclose any confidential information of the other, and such information shall not be disclosed in whole or in part to others, or reproduced or copied in whole or in part for any purpose, without the express written consent of the disclosing party. If such information is in tangible form, it shall be returned to the disclosing party upon request.**

Each party shall not without first obtaining the written consent of the other, disclose to any person, firm or enterprise, or use for its benefit, any information relating to the pricing, methods, process, financial data, lists, apparatus, statistics, programs research, development or related information of the other party, concerning past, present or future business activities of the other party.

2. Information shall not be deemed "confidential" for purposes of this agreement to the extent that such information, (1) was acquired by a party hereto before the contemplated discussions and when such party was under no obligation to keep such information confidential, (2) is or becomes publicly known through no wrongful act of a party hereto, (3) is rightfully obtained by the receiving party from any third party who is legally entitled to possession of such information without similar restriction and without breach of any obligation owed to the disclosing party, (4) is disclosed pursuant to a lawful requirement or request of a government agency; or (5) is approved for release by written authorization of the owning party.

3. Each party further acknowledges and agrees that, in the event of a threatened breach or active breach by it of the provisions of the Agreement, the other party will have no adequate remedy for damages, and, accordingly, shall be entitled to an injunction against such threatened breach. However, no provision in this Agreement shall be construed as a waiver or prohibition of any other legal or equitable remedy for threatened or active breach hereof.

4. Nothing contained in this Agreement shall be construed as granting or conferring upon a party hereto any proprietary right, by license or otherwise, in any confidential or patented information disclosed by the other party.

For INNOVAD:

For NEC America Inc.

By: Dan Henderson

By:

Title: _____

Title: _____

Date: _____

Date: _____

APPENDIX DD

Enrolled

Innovad

Innovative Development & Manufacturing

October 1, 1993

Mr. Sho Salto
Shinwa Communications of America Inc.
P.O. Box 26407
Oklahoma City, OK 73126

SUBJECT: Confidential Meeting at Shinwa Communications Today with Casio

Dear Mr. Salto:

Thank you for taking an interest in me and my new invention related to intelligent numeric paging devices and systems. I am greatly honored that you have offered to help make introductions for me to NEC during my visit to Japan this month.

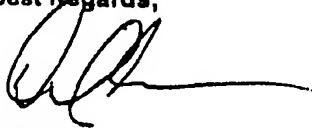
I am prepared to discuss possible license agreements, some joint venture or strategic partnering arrangements if it makes sense for interested companies such as NEC and Casio. My vision is to change the way in which pagers are used in the future and improve the information that is available to the end-user. These relationships and the technology I have developed will only be a starting point for many new ideas planned for that future.

After you have had a chance to discuss this matter internally there I would welcome the opportunity to meet with you again.

Thank you again for your interest in my project and for your comments related to my new invention. Please thank Mr. Summerlin for his hospitality during my visit there.

I look forward to a developing a mutually rewarding relationship with you and your company and will work hard to earn the trust you have placed in me.

With Best Regards,



Dan Henderson

Attachment - letter to Kazuo Hashimoto

Thank you for all your help.

NEC
KOJI YAMASAKI
MANAGER, ENGINEERING
3RD PRODUCT
DEVELOPMENT DEPARTMENT
MOBILE COMMUNICATIONS DIVISION
NEC Corporation
4035, IKEBE-CHO, MIDORI-KU
YOKOHAMA, 226 JAPAN
TEL (045) 939-2314
NEFAX (045) 939-2363

NEC

NOBORU SAKATA
ASSISTANT MANAGER
DEVELOPMENT PROMOTION OFFICE
MOBILE COMMUNICATIONS DIVISION

NEC Corporation
4035, IKEBE-CHO, MIDORI-KU
YOKOHAMA, 226 JAPAN
TEL (045) 939-2361
FAX (045) 939-2360

NEC

HIDEYUKI TSUNODA
SENIOR MANAGER
MOBILE COMMUNICATIONS
ENGINEERING DEPARTMENT

NEC Shizuoka, Ltd
4-2 SHIMOMATA
KAKEGAWA, SHIZUOKA 430 JAPAN
TEL (0537) 22-8237
FAX (0537) 22-8239

稿本社社長殿

本日 MR Henderson 様 貴社へお送りした、
上記の件、山崎博義 氏に Contact
して下さるべく、お願い致します。

APPENDIX EE

**MITSUI COMTEK CORP.**

200 PARK AVENUE, SUITE 4114-11
NEW YORK, N.Y. 10168
TEL (212) 878-0814
FAX (212) 878-4037

via (510) 487-6762

October 8, 1993

Mr. Dan Henderson
Innovad
33300 Mission Blvd., Suite 131
Union City, CA 94587

Dear Mr Henderson,

Thank you for your letter dated October 1, 1993 and phone call on the day before yesterday.

As I informed you I would most probably visit Japan week of October 18, 1993. If your appointment with Casio through Mr. Hashimoto meets this schedule, I would be happy to join such meeting.

Casio and Mitsui has been jointly developing the product with very similar concept to yours. Caller ID was one of the idea we have been working. If your idea and technology is different from Casio's one, we would be very much interested in reviewing further details. In this sense definition and technological explanation of "Caller ID" is very important thing for us to start with.

I would contact Casio to know their position for your proposal and advise you any outcome.

Looking forward to seeing you again very soon.

Sincerely yours,


Ken Shima
Mitsui Comtek Corp

cc: M. Hatama
Manager of Mobile Telecommunication Dept.
Telecommunication Business & Project Div.
Mitsui & Co., Ltd.

APPENDIX FF

APPENDIX GG

Innovad

Innovative Development & Manufacturing

11/3/93

Mr. Sho Saito
President
Shinwa Communications of America Inc.
3501 Melcat Drive Suite E
Oklahoma City, OK 73179

Dear Mr. Saito:

Thank you for meeting with me last week to discuss my new Ideas regarding an improved numeric paging receiver accessory and an improved programming system for paging receivers.

I am very interested in working with you on the programming project that you mentioned and have several good candidates in mind that could be helpful in meeting your needs. I look forward to learning more about your requirements when you are ready.

Attached is the information we discussed for Mr. Summerlin and Mr. Hiraiwa to present upon their visit to Japan next week. I believe there are several ideas that could mean new products and new markets for Shinwa Communications. I will call them today and see if there is any further information they will require.

Today Mr. Hashimoto asked me to manage his patent portfolio for Hashimoto Corporation, which includes over 1000 patents world wide. This will be in addition to my current venture with him but will not exclude any future business arrangements between Innovad and Shinwa.

I am sending a few patents which I believe will be of mutual benefit for discussion that may apply to your products. I would like to explore which patents will be most valuable to you and arrive at a reasonable royalty arrangement where appropriate.

I look forward to building a long and successful relationship with you and your company. Thank you for taking an interest in me and my ideas - I am committed to help ensure your success there at Shinwa.

With Best Regards,



Dan Henderson

APPENDIX HH

HENDERSON BUDGET ANALYSIS - PATENT LICENSING PROGRAM

NOTE: ALL RECEIPTS FOR EXPENSES WILL BE SENT WITH A COPY OF THIS REPORT
TO HASHIMOTO CORPORATION - ATTN: Mr. Eric Hemming

EXPENSE

ITEM

Nov.-Dec.

TRAVEL

AIRFARE

LODGING

CAR RENTAL/TRANSP.

FEES / MISC.

728 includes Dallas, Oklahoma City Shinwa Communications
326.4 for Las Vegas CF show
160 for Dallas 12/19 trip re Samsung
0

LEGAL

ATTORNEY FEES

FORMAL SEARCHES

FORMAL DRAWINGS

FILING FEES

CONTRACT ADMIN.

510 File Wrappers for US 4,874,263, 5,077,788, 4,684,434 ..
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COMMUNICATION

TELEPHONE / FAX

POSTAGE

PRINTING

Misc

TOTAL

768.47 October, November, December
73 Index to attorneys for Samsung, other matters
269.14 computer time rental for patent drawings, copies, etc.
1066.55 intellect brochures, printing/design
\$2,826

42 11 11 11 11 11 11 11 11 11

APPENDIX II

Innovative Development & Manufacturing

This Agreement is between

(hereinafter called "Recipient")

and Daniel Henderson, President of Innovad (hereinafter called "Owner").

The Owner possesses certain confidential information concerning a

caller id and paging system

as depicted and described in the Attachments listed hereunder

which the Owner will disclose in confidence to the Recipient.

In consideration of said disclosure, Recipient agrees to treat the information disclosed as confidential, and will use the same efforts as are regularly employed by it with respect to its own nonconfidential information to avoid disclosure to others.

The recipient will not divulge or use in any manner any of the confidential information that it receives from the Owner, unless by written consent from the Owner. Provided, of course, that this obligation to treat information confidentially will not apply to any information already in Recipient's possession and disclosed as such, to Owner, prior to signing this agreement.

The Recipient will return all information and copies to the Owner if requested to do so by Owner or his appointed agent.

The laws of the STATE OF TEXAS shall govern the interpretation and enforcement of this Agreement. In particular, the trade secret laws of the STATE OF TEXAS shall apply.

Venue for suit on the construction or enforcement of this Agreement shall be Tarrant County, Texas.

RECIPIENT

By:

Nämn:

Title:

Company Name if signing as an agent:

Date of Signature

APPENDIX JJ

in•tel•lect (in`t'l ekt`) *n.* [
1. the power of knowing.



*intellect*TM

Numeric Pager

Alphanumeric Display



Identification

Location

Message

Operation Switches

ANI + DFME +
Message Code

**Intellect helps you Know, Communicate, and Remember
information about the World around you...**

Alphanumeric Communication Delivered at Numeric Paging Cost.

**Now you can keep in touch and stay informed with a
low cost easy to use solution!**

Features

Functions

Benefits

Numeric Paging Receiver

Receive numeric data,
Display alphanumeric data.

- Low Monthly Cost compared with cellular or alphanumeric paging services.

Serial/Parallel/Infrared Programming interface

Download data including Name, Address, Phone #, Appointment data.

- Connectivity with data stored at the office.

Intelligent Message Notification

Combined Caller ID with DTMF entry of caller phone# and message code is compared with data previously downloaded by the user.

- Automatically determines WHO, WHERE, WHY someone is calling.

- Reduces cellular calling costs.

Automatic Dialer

Numbers received, prestored telephone #'s, long distance access and account codes, are automatically dialed for the user by placing the pager against the telephone handset.

- Easier to use to centers, "MFB" Services, and other data easily when in office.

- A lot of environments repaired are easily received.

Removable Keyboard Accessory

By attaching keyboard with connector, a user may program names, addresses, tel. #'s, other data in pager download memory.

- Convenient for users or comfortable

Simple User Interface

Most functions require only simple, intuitive directions and one or two buttons for operation.

- Easy to enjoy collect quickly.

Patented and Oth.

ding



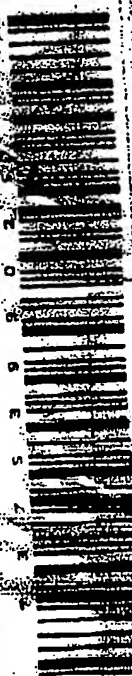
For more information on other innovative technologies telephone:

InnovadTM
Innovative Development and Manufacturing
1-800-441-4431

© Innovad

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AGE
MALE
MAY 3 1944



500 444-443

INDIVIDUAL

INDIVIDUAL

Suite 131

MISSION Blvd

94587

CALL

LONG BEACH AREA

757 531 9025

TRAN 52100

SPECTRUM PRINTING

944 Ark St

FL

SPRINTS

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2 6

102

NAME

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REMARKS

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APPENDIX KK

TELEDYNAMICS

TeleDynamics, L.L.P. • 2200 Wheless Lane
Austin, Texas 78723-2097
(512)928-1533 • 24 Hour Fax: (512)928-1575

ORDER TOLL FREE: 1-800-847-5629



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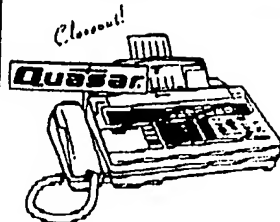
Panasonic

FAX MACHINES



\$399.95

KX-F90 Facsimile with answering machine, integrated telephone and automatic telephone/facsimile switching, 17 second transmission speed, activity reporting, LCD display, automatic paper cutter, 16-level halftones, polling, 10 page document feeder, monitor speaker, 10-station one-touch dialer, 50 station speed dialer, automatic redial, timed flash memory, pause.



\$399.95

PAX6 Facsimile machine offers touch auto record, 10 page cutter, lay tra

egrated machine
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BELL Phones

BY BELL TELEPHONE COMPANY



\$359.75

FAXLINE1900 features built-in answering machine, automatic paper cutter, 10 page document feeder, LCD display with time, date, number dialed, 16 step gray scale, 70 speed dial locations, delay transmit, activity report, transmission confirm slip, 164' thermal paper roll, 110/220 VAC switchable.



\$297.65

M82 feeds silent when 10 or an ad bers, moni phone play.

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\$339.98

M15 cutter, pre-re level dialing display identification abilities 88' the

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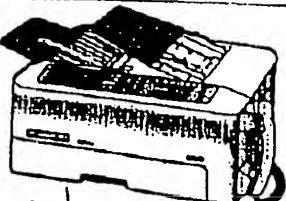
MITSUBISHI

INTERNATIONAL CORPORATION



\$669.00

MIT-F15DCF DC Portable facsimile kit includes fax machine with speaker phone and retractable carry handle, cigarette lighter adapter/DC power supply, acoustic coupler, RJ-11 modular telephone cable, and two 49' rolls of thermal paper. The fax machine features 16 character x 2 line LCD display, 50 name and number alphanumeric speed dial memory, clock and calendar, alpha memory search, 12 second transmit time, 16 level halftones, and copy mode.



\$939.75

M3000 sheet accept pages ception mand grayscale feeder, play.

50-
10
100
100
100
100
100
100

PF100 Donor Film for M3000 - More than 700 page copy yield. \$46.75

15PWR Optional Clip-on power supply. \$75.00
15CSE Optional Carrying with Shoulder Strap. \$45.00
15BAT Optional Clip-On Battery \$109.00

FAX MACHINE

Canon

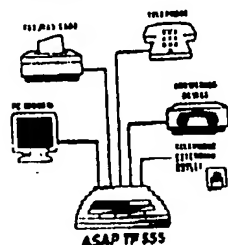
FAXPHONE 16 Features automatic facsimile/phone switchover with extension phone transfer, delayed transmission, 10 sheet automatic document feeder, 16 shades of gray scale, polling, LCD, local copy function, 10# one touch memory plus 25# speed dialing, transmitter terminal identification, activity report, monitor speaker, and hold.

\$299.95

FAX SWITCHES



COMMAND COMMUNICATIONS, INC.



TF-300 Plus Fax/Phone/Answering Device \$58.75
TF-333 Fax or Computer/Phone/Answering Device \$64.85
TF-505 Fax/Computer/Phone/Answering Device \$84.85
TF-555 Fax/Computer/Phone/Answering Device \$89.95
CF3000 Data Switch for Fax/Computer \$49.85

High Sensitivity

PAPER49 - 49' thermal facs
PAPER98 - 98' thermal facs
PAPER 164 - 164' thermal fa
PAPER 328 - 328' thermal fa

CALLER ID

CIDCO
INCORPORATED

"The Caller ID C"

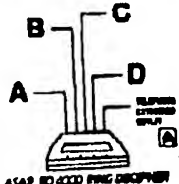
SN-30A-02 Holds 30# me blocked call light feature.

SL-64-2 Holds 64# memory AC Adaptor).

SA-60A-01 Holds 60 name/ blocked call light.

SA-85A-01 Holds 85 name/ blocked call light.

****Models SA-60A-01 and S. ing either English or Spani-**



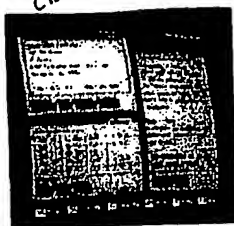
\$52.85

RD4000 RING DECIPHER is a call routing device that works with the distinctive ringing service provided by the telephone company. It directs incoming calls to any one of four designated telephone devices on a single telephone line.

CALLER ID PRODUCTS

ROCHELLE

Classical!

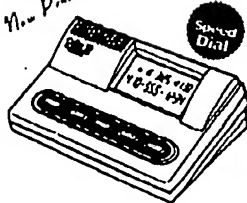


\$139.95

CALLER ID + PLUS is the first integrated hardware and software system to let you use your PC to link the calling number to your database of information on the caller. The Caller ID+Plus displays the number of the incoming call with useful information about the caller and a log of all calls to and from the number. (Requires Caller ID Service.)

UNIVERSAL

New Product!



\$27.60

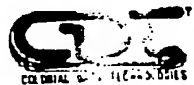
TEL-6650 Caller ID system keeps a record of the last 50 calls and features a one-touch speed dial of any number in memory, automatically displays complete telephone number, time and date of incoming calls, large easy to read display, desk/wall mountable, requires one 9V battery (not included). Available in Pearl/Grey.



\$33.90



\$51.90



\$61.65

SoftPHONE is made from hi squeezable and lightweight. SoftPHONE, you won't have son on the other end! Each n design with layers of foam in t Each phone features on/off pulse dialing. Available in SP-KETBALL; SP-13 FOOTBALL SP-19 RAINBOW; and SP-

RECYCO-SP-11

RECYCO-SP-12

RECYCO-SP-13

RECYCO-SP-18

RECYCO-SP-19

RECYCO-SP-20

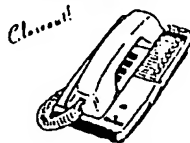
\$21.35



\$9.99

SH910 High heel shoe phone is pulse/tone switchable with redial and mute. Available in Black.

BELL Phones MULT
BY NORTHWESTERN BELL PHONES



\$29.95

NW with mem hear dial



\$5.89

AC-400 Stylite clear one piece with neon bulbs that flash when the phone rings, tone/pulse switchable, with ringer on/off. Available with white cord or multi-colored cord.



\$89.75

VAF telep (up and spe way pul with aid bat



\$26.95

SWATCH twin phones allow the user to talk and listen with the handset and the base! The deluxe model offers 20 names and numbers for memory dialing. Standard models: TXO200 Naranja and TXW202 Marshmallow.

Panasonic



1-5 6-Up
\$144.50 \$141.65

KX ph. ern co. tou dia val tin



\$34.85

1208 TALKING GARFIELD speaks with each ring of the phone, Garfield says 11 different wise-crack phrases, redial, pulse/tone dial.



\$24.95

GOTHAM telephone has hand painted enamel finish, brass bell ringer, tone dialing, mute and redial. Available in Black or Red.

TI SYSTEMS CORPORATION



\$139.97

SI or sp. m. pa in

RADAR DETECTOR



\$134.65

Cobra RDL-412SW Trapshooter superwide band radar/laser with adjustable slide-in windshield bracket, signal strength LEDs, anti-falsing circuitry, detects all radar and laser signals including photo, stalker, X, K, Ka superwide band plus laser, separate audible alarms for all radar/laser signals.

unidar



\$71.35

L b. h. c. v. c.

CORDLESS PHONES

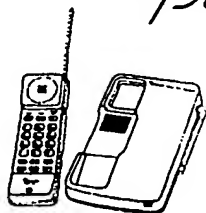
CONAIR

CTP9000 Smallest 2 Channel Cordless telephone on the market! It features 2 channel selection, compander noise circuitry, tone/pulse dialing, desk/wall mounting, one-way paging. Available in Black.

\$52.75

900 MHZ PHONE

Tropez



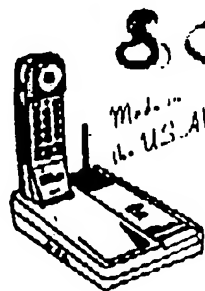
\$164.95

900DL feature and intr select out-of-program page, f tone/p



\$219.65

900DZ new se erphon dialing nicatio base, 2 way p numbe tomati



\$269.85

CP-9 spread cordi vers for te vers antea chara Avail

Panasonic

KX-T3935 Cordless with 10-channel auto scanning with remote change, 10# auto dialing, one-way page, secure guard to prevent eavesdropping from scanners, 21-day battery life in standby mode, handset can be charged while inverted on the base unit.

KX-T3950 Cordless with 10-channel auto scanning with remote change, LCD on handset, 10# auto dialing, automatic intercom with 2-way paging, secure guard to prevent eavesdropping from scanners, 21-day battery life in standby mode, handset can be charged while inverted on the base unit.

1-5 6-UP
01.85 \$99.85

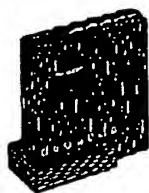
1-5 6-UP
10.75 \$108.85

UNIVERSAL

TEL-3700A Cordless phone features redial, mute, one-way page, low battery indicator, white/gray color.

\$35.95

Available to Dealers in ALASKA, ARIZONA, COLORADO, IDAHO, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, OKLAHOMA, OREGON, TEXAS, UTAH, WASHINGTON and WYOMING.



\$84.95



\$96.65



ANSWERING SYSTEMS

ATT1337 Remote Digital Answering System, digital LED message display, memo feature, changeable security code, announce only feature, new message playback, call intercept, up to 7 minutes of digital recording memory.



\$35.99

CAN with save page micro tection sec me



\$98.75

KX- 10-12 two-voice com me record able

BIG BUTTON PHONES

III

8810 Big Button with stylish over-sized dial, Braille characters on keys, 3 programmable memory locations, neon visual ringing indicator, desk/wall mount, tone/pulse, redial, mute, flash, amplified handset with volume control.

\$29.85



BellSouth Products



Classical
\$29.85

BUTTONS PLUS-10 Extra large keypad telephone includes handset volume amplifier, ten number memory, electronic hold, redial, four faceplates packed within each unit: Taupe, Gray, Rose and Blue.

TRIM STYLE PHONES



\$18.47

BS-456V Volume Control and amplifier are offered on this Extra Big Button trimstyle phone with backlit keyboard, hold with LED indicator, mechanical ringer, mute, redial and flash features.

UNIVERSAL



\$9.00

TEL-4055L Big-Button telephone with tone/pulse dial, redial and mute. Wall or Desk mountable. Available in Oyster color.



AT&T

VIDEO TELEPHONE

Available to Dealers in ALASKA, ARIZONA, COLORADO, IDAHO, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, OKLAHOMA, OREGON, TEXAS, UTAH, WASHINGTON and WYOMING.



\$879.00

VIDEOPHONE2500 with full color motion video, 3.3" (diagonal) video screen, fixed focus camera lens with 1 to 9 foot focal range, self-view mode, one- and two-way video mode, speakerphone, multi-level handset and speaker volume control, hold and mute buttons, flash, ringer on/off, tone/pulse dialing, 12# memory.

SINGLE LINE W/INTERCOM

Panasonic



\$99.85

KX-T2180 New Intercom Integrated Single Line Telephone System with answer-back speakerphone, individual page and intercom works with 2 to 8 units (KX-T2180 or 3280), single intercom path, 28# memory, programmable toll restriction, volume control.



TEXAS INSTRUMENTS

CALC



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\$9.95

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Panasonic

GLOBAL POSITIONING SYSTEM RECEIVER



KX-G5500 Global Positioning System Receiver features compass, backlit LCD to allow you to use it in all kinds of lighting receiver, 99 waypoints, latitude, longitude and altitude, uses 1 battery or 5AA batteries.

UNIVERSAL

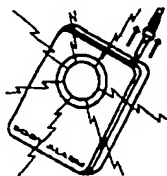
SECURITY PRODUCTS

Entry Sentry II Security Observation System comes complete with monitor in metal housing, one industrial quality camera with attached standard DIN-type connectors and all necessary wiring. It is engineered for a full range of residential, commercial theft protection in warehouses and shopping areas, store entrances and parking lot security. It features monitor selection of manually or automatically viewing up to four cameras, with

Limited Time Special Offer \$249.00

EXTRA CAMERA for the Entry System II (System comes with ONE camera included)

DAC Technologies



\$8.95

BODY ALARM for individual security unleashes an ear-piercing, 130 decibel alarm when the pin is removed. The compact Body Alarm is 9 volt alkaline battery operated and is made of non-breakable ABS plastic.

SCRAMBLER



\$425.00 a Pair
\$214.00 each

PAGING PRODUCTS

TT SYSTEMS CORPORATION



\$19.99

PM-1 Paging Module connects any touch-tone phone to a public address amplifier and speaker system, can be used with single-line or multi-line system.

VIKING



\$88.00

PA-2A Provides loud electronic ring for night bell, warehouses, outside yards, etc. The PA-2A monitors up to 6 C.O. lines for ring or can be activated by a key system dry contact closure. Connect to unused trunk line input or paging port on Electronic or 1A2 Key or "No KSU" phones for 2 watts of paging power (enough to drive 3 paging horns). The PA-2A can also provide background music from an external source. Weather-proof paging horn included.



\$28.00

VIKING



\$39.00

EVERETT STU

©CORD-Minder
RETRACTING TELEPHONE CORD

ACCESSORIES

CORD MINDER replaces the handset cord and automatically takes up the slack and stows the cord neatly away - out of sight, out of mind, and more importantly - out of the way! Cord Minder is engineered for trouble-free operation. Design features include a steel spring, flexible strain relief, a durable case, special fiber for strength. Six month factory guarantee.



16' length in R-71 Ivory, R-72 White or R-74 Clear

\$5.95

8' length in R-85 Ivory, R-86 White or R-88 Clear

\$4.95



GOTTA GO all you need is the "Clicks" and relief from the "Clicks" and relief from a button! This is a great situation when you are busy and hold the button down. This will briefly interrupt caller may offer "for" must be the caller.

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